

KANSAS ADMINISTRATORS' AND TEACHERS' KNOWLEDGE
OF SPECIAL EDUCATION TRANSITION

By

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Abstract of Dissertation Presented to the
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A survey was conducted with school administrators and teachers of students with mild disabilities to obtain information concerning their knowledge of special education transition. Two Special Education Transition Questionnaires were developed with the assistance of expert review and then pilot-tested to establish their validity and reliability. Test-retest reliability was determined at $r = .92$, while internal consistency, measured by a Kuder Richardson 20 was established at $r = .90$. Two formal debriefings were conducted with a total of 10 individuals to determine questionnaire clarity.

The questionnaires were disseminated to 150 school principals and 150 teachers of students with mild disabilities. A total of 162 usable questionnaires were returned (54%).

From the survey results, it was found that elementary, middle, and high school teachers do not differ in their knowledge of special education transition. Overall, teachers mastered only 45% of the material. Only three questions were responded to correctly by more than 60% of the respondents. It was also found that elementary, middle, and high school administrators do not differ in their knowledge of special education transition. Overall, administrators mastered only 33% of the material. Only two questions were responded to correctly by more than 60% of the respondents.

Conclusions relevant to the expansion of staff development and preparation programs are discussed. Leaders in the field of school administration and special education were encouraged to raise their requirements in special education transition. Recommendations for further transition research are provided.

CHAPTER 1 INTRODUCTION TO THE PROBLEM

The successful transition of individuals with mild disabilities into the community is a national priority (Rusch & Phelps, 1987). During the past decade, special education literature has been replete with issues concerning the successful transition of individuals with mild disabilities into the community (Brolin, 1989; Gorden & Roe, 1985; Hasazi, Wehman, 1992). The office of Special Education and Rehabilitative Services cited the major goal of transition as employment (Will, 1984).

Two employment movements preceded the current transition movement. During the 1960s, work study programs were conducted cooperatively between the public schools and local offices of state rehabilitative agencies (Kolstoe & Frey, 1965). The general goal of these programs was to create an integrated academic, social, and vocational curriculum, accompanied by appropriate work experience, to help students with disabilities gain the skills to live and work in their community (Kolstoe & Frey, 1965). The centerpiece of the work study program was the cooperation of local school agencies with community employers. Cooperation resulted in a significant increase in the number of students in work placements as part of their high school program. Relationships between local schools and vocational

rehabilitation agencies also facilitated the transition of students from school to the adult community. Despite the tremendous growth and prosperity of this program during the 1960s, it basically died during the 1970s due to funding regulations that forbade rehabilitation agencies from paying for services that are the legitimate responsibility of other agencies (Halpern, 1992).

Career education came into being in 1970, when Sidney Marland, Commissioner of the United States Department of Education, declared career education to be the top priority of the United States Office of Education (Halpern, 1992). Following this pronouncement, a federal initiative was undertaken and approximately \$90 million in demonstration grants were awarded through funding structures available under Parts C and D of the Vocational Education Act (Hoyt, 1982). Most of these grants were concerned with career education for the general population of students. The federal government defined career education as the totality of experience through which one learns to live a meaningful satisfying work life. Work is conceptualized as a conscious effort aimed at producing benefits for oneself and others. Career education provides the opportunity for children to learn, in the least restrictive environment possible, the academic, daily-living, personal, social, and specific vocational work skills necessary for attaining their highest level of economic, personal, and social fulfillment. Individuals can obtain fulfillment through work and in a

variety of other societal roles and personal life styles including pursuits as students, citizens, volunteers, family members, and participants in meaningful leisure-time activities (Position Paper, 1978). The work study and career education movements provided a legacy for the emergence of the transition movement in the 1980s.

In 1982, a new federal transition initiative emerged in the form of a position paper from the Office of Special Education and Rehabilitative Services (Will, 1984). The paper described a "transition model," known as the "bridges model." In this model, Will described three types of services (bridges) needed to facilitate the transition from school to work. The first bridge, labeled "transition without special service," refers to the use of generic services available to anyone in the community (Halpern, 1992, p. 205). The second bridge, "transition with time-limited services," refers to specialized, short-term services, where presence of disability is usually required to qualify a person for access to the service (Halpern, 1992, p. 205). The third bridge, "transition with ongoing services," refers to continuous professional support to obtain and maintain employment (Halpern, 1992, p. 205). Today, the "bridges model" continues to be used to provide employment opportunities for persons with disabilities.

Even though the "bridges model" increased employment rates of individuals with mild disabilities, they continue to have low employment rates (Hasazi, Gorden, & Roe, 1985;

Neubert, Tilson, & Ianacone, 1989; Thurlow, Bruininks, & Lange, 1989). For example, Neel, Meadows, Levine, and Edgar (1988) investigated the employment status of 160 former students with behavior disorders. Telephone interviews were conducted with parents who had children exiting the education system between 1978 and 1986. Interview data indicated 60% of students were employed.

Mithaug, Horiuchi, and Fanning (1985) also studied the employment rate of persons with mild disabilities. Interviews with former students indicated 69% were employed, and 32% were working full-time.

Researchers who have conducted follow-up studies have found a 29% to 78% employment rate for persons with mild disabilities (Fourqurean & Lacourt, 1990; Haring, Lovett, & Smith, 1990; Kranstover, Thurlow, & Bruininks, 1989; Renfroe, 1988; Schalock & Lilley, 1986; Succimarra & Speece, 1990). Individuals with learning disabilities had the highest employment rate followed by individuals with emotional disabilities and mild mental retardation (Affleck, Edgar, Levine, & Kortering, 1990). A higher employment rate is needed for persons with mild disabilities.

Societal Benefits of Employment

Employment of persons with mild disabilities will lessen costs of public assistance programs (Halpern, 1990). Historically, unemployed individuals with mild disabilities rely on three public assistance programs for financial support, including (a) supplemental security income (SSI),

(b) medicaid, and (c) food stamps (Halpern, 1990). Society benefits from the employment of persons with mild disabilities.

Cost-benefit analyses have also indicated the benefits of employment. Lewis, Bruininks, Thurlow, and McGrew (1988) conducted a hypothetical comparison of employed and institutionalized individuals with mild disabilities. Individual lifelong employment resulted in a \$667,927 net societal gain. Hill, Banks, Wehman, Hill, and Schafer (1987) estimated that society gained \$1.87 for every \$1 spent on the supported competitive employment of individuals with disabilities. Individuals with mild disabilities and society will benefit from increased employment opportunities.

Recent follow-up studies and social service expenditures confirm that although schools are attempting to educate students with mild disabilities to enable them to become members of the adult community, a large number of these young people have had limited opportunities to acquire skills that help them obtain meaningful employment. As a result of limited opportunities, Congress enacted legislation to provide greater opportunities for students with mild disabilities. Specifically, the 1990 amendments to the Education of the Handicapped Act added transition requirements to the individual education plans of students with mild disabilities. The federal government defined transition services as a coordinated set of activities for a student, designed within an outcome-oriented process, which

promotes movement from school to postschool activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation (Hallahan & Kauffman, 1991). "The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other postschool adult-living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation" (Sec. 602 a.) (19).

The law also requires that each individual education program include

(a) statement of the needed transition services for students beginning no later than age 16 and annually thereafter (and, when determined appropriate for the individual, beginning at age 14 or younger), including when appropriate, a statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting, and in the case where a participating agency, other than the educational agency, fails to provide agreed upon services, the educational agency shall reconvene the individual education program team to identify alternative strategies to meet the transition objectives (Sec. 602 a) (p. 20).

Despite the progress and accomplishments related to implementation of the Individuals with Disabilities Education Act (IDEA) over the last few years, much remains to be done to improve the outcomes of youth with disabilities (Hasazi & Clark, 1988). Currently, very little transition information

exists on the nature and extent of state and local implementation, including policies, procedures, and practices. Moreover, policy-makers, administrators, and educators at the federal, state, and local levels lack information regarding the nature of student participation and impact these services have on student outcomes; the extent other agencies are involved in the transition process; and the degree transition services access and use information and services available from a variety of federal programs (Research in Education, 1993).

Information on current education practices also is needed in order for changes to occur in transition education. Researchers who have studied organization and individual change stress the importance of information (Bennis, Beane, & Chin, 1985; Kimbrough & Burkett, 1990; Sergiovanni, 1990; Toffler, 1990). Information will act as a springboard to develop innovative ideas to change transition policies, programs, and university teacher training programs.

Purpose and Objectives

The purpose of the present study is to investigate the level of knowledge teachers and administrators have on the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476). Information obtained will help educators design professional training activities and transition programs for students with mild disabilities.

Questions

This study focused on eight questions:

1. Do elementary, middle, and high school teachers of students with mild disabilities have knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

2. Do elementary, middle, and high school teachers of students with mild disabilities differ in their knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

3. Do elementary, middle, and high school administrators have knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

4. Do elementary, middle, and high school administrators differ in their knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

5. Does the level of preparation (bachelor's, master's, or doctorate) of elementary, middle, and high school teachers of students with mild disabilities correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

6. Does the level of preparation (bachelor's, master's, or doctorate) of elementary, middle, and high school administrators correlate with the level of knowledge of the

transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

7. Does the number of years of instructional experience of elementary, middle, and high school teachers of students with mild disabilities correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

8. Does the number of years of administrative experience of elementary, middle, and high school administrators correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

Null Hypotheses

The following null hypotheses were tested in the current study:

H1: There will be no statistically significant difference among elementary, middle, and high school teachers' of students with mild disabilities knowledge of transition.

H2: There will be no statistically significant difference among elementary, middle, and high school administrators' knowledge of transition.

H3: There will be no statistically significant relationship between elementary teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H4: There will be no statistically significant relationship between middle school teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H5: There will be no statistically significant relationship between high school teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H6: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H7: There will be no statistically significant relationship between middle school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H8: There will be no statistically significant relationship between high school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H9: There will be no statistically significant relationship between elementary school teachers' transition knowledge and the number of years of instructional experience they have.

H10: There will be no statistically significant relationship between middle school teachers' transition

knowledge and the number of years of instructional experience they have.

H11: There will be no statistically significant relationship between high school teachers' transition knowledge and the number of years of instructional experience they have.

H12: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the number of years of administrative experience they have.

H13: There will be no statistically significant relationship between middle school administrators' transition knowledge and the number of years of administrative experience they have.

H14: There will be no statistically significant relationship between high school administrators' transition knowledge and the number of years of administrative experience they have.

Definition of Terms

Benefit-cost analyses are formal analytical procedures used to assess the financial outcomes of providing a service (Hill, Banks, Wehman, Hill, & Schafer, 1987).

Behavior disorder is a condition with one or more behavioral characteristics that are (a) exhibited at either a much higher or lower rate than is appropriate for one's age; (b) documented as occurring over an extended period of time in different environmental settings within the school, and

home, or community; and (c) interfering consistently with the student's educational performance. This interference with educational performance shall not be a result of intellectual, sensory, cultural, or health factors that have not received appropriate attention (K.A.R. 91-12-22[c]).

Mild disabilities refers to a condition categorized as specific learning disabilities, mild mental retardation, or behavior disorders (Meese, Overton, & Whitfield, 1993).

Mild mental retardation is a term used to describe the degree of retardation present when intelligence test scores are 50 to 55 to approximately 70; and in functional capabilities which can be developed to aid the individual in interaction and decision making (K.A.R. 91-12-22).

Quality of life refers to the number of opportunities individuals have to experience events in their environment (Shallock & Lilley, 1986).

Specific learning disabilities is a disorder in the ability to learn effectively in respect to one's own potential when presented with an appropriate regular instructional environment. The inability to learn effectively is a disorder in an individual's ability to receive, organize, or express information relevant to school functioning, and is demonstrated by a significant discrepancy between aptitude and achievement in one or more of the following areas: preacademic skills, oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, mathematics calculation, and

mathematics reasoning. This discrepancy shall not be primarily attributable to vision, hearing, or motor impairment; mental retardation; emotional disabilities; environmental, cultural, or economic disadvantage; or a history of an inconsistent education program (K.A.R. 91-12-22[rr]).

Delimitations of the Study

The study is delimited by geographical restriction to the state of Kansas. Teachers and administrators surveyed were randomly selected. No consideration was given to sex or socioeconomic status of the subjects.

Limitations of the Study

Differences in professional training, school districts, and documentation techniques may limit the generality of study findings. Differences in item interpretation and response rate may limit the generality of this investigation. Finally, the problem with accurately identifying, diagnosing, and evaluating individuals with mild disabilities may limit the generality of the findings.

Summary and Overview of Remaining Chapters

The lives of individuals with mild disabilities have changed. They have gained opportunities that allow them to live, work, and play in their communities. Additional employment opportunities are needed to improve their quality of life. The intent of this researcher was to determine the level of knowledge teachers and administrators have on the transition requirements of the Individuals with Disabilities

Education Act. The data obtained will be used to compare the knowledge of teachers and administrators. Also, the data will help educators design professional training activities and transition programs for students with mild disabilities.

In Chapter 2, the theoretical foundation of the study is presented. Emphasis is placed on a review and analysis of pertinent studies addressing the employment rate of individuals with mild disabilities. Personal and societal benefits of employment are discussed. In Chapter 3, the methods and procedures used to design a questionnaire to survey Kansas administrators and teachers of students with mild disabilities are described. In Chapter 4 the results are presented. Finally, Chapter 5 consists of a discussion of the results in terms of current knowledge, implications for education programming for persons with mild disabilities, and future research.

CHAPTER 2 REVIEW OF RELATED LITERATURE

Individuals with mild disabilities have low employment rates (Neubert, Tilson, & Ianacone, 1989). Low employment rates cause them to depend on their family or social service agencies for financial support. Higher employment rates are needed for individuals with mild disabilities.

This study was designed to answer the following questions regarding the transition education programs of students with mild disabilities:

1. Do elementary, middle, and high school teachers of students with mild disabilities have knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

2. Do elementary, middle, and high school teachers of students with mild disabilities differ in their knowledge of the transition requirement of the Individuals with Disabilities Education Act (P.L. 101-476)?

3. Do elementary, middle, and high school administrators have knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

4. Do elementary, middle, and high school administrators differ in their knowledge of the transition

requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

5. Does the level of preparation (bachelor's, master's, or doctorate) of elementary, middle, and high school teachers of students with mild disabilities correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

6. Does the level of preparation (bachelor's, master's, or doctorate) of elementary, middle, and high school administrators correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

7. Does the number of years of instructional experience of elementary, middle, and high school teachers of students with mild disabilities correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

8. Does the number of years of administrative experience of elementary, middle, and high school administrators correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

In this chapter, a summary and an analysis of professional literature showing the significance of the current study will be presented. The chapter is divided into five major sections. Selection criteria for the literature review and employment information are presented first. In

subsequent sections, transition, and transition education programs are presented. The chapter concludes with a summary and implications of previous research for the present study.

Selection of Relevant Literature

The initial step in this review was to determine the criteria for inclusion of sources. All relevant studies completed in the last 20 years (1973-1993) were examined. In addition, any notable research cited in the literature earlier than the 20-year time period was also considered.

Professional literature concerning employment of individuals with mild disabilities had to meet the following criteria to be included in the review:

1. The subject's intelligence quotient (IQ) score and mild disability label had to be indicated.
2. The treatment conditions and experimental procedures must have been detailed enough to permit replication.
3. The experimenter's interpretations had to be consistent with the results displayed.

Approximately 200 references were located using these descriptors: employment, community-based living, mild disabilities, mild mental retardation, learning disabilities, emotional handicaps, vocation, behavior disorders, transition, quality of life, unemployment, special education law, employee, employers, residences, and income. Approximately 120 references met the aforementioned criteria; 75 were used in the chapter.

Employment

Work can be defined as using one's physical and mental energies to accomplish something productive. Our society is based on a work ethic; we place a high value on work and on people who contribute. From society's standpoint work is usually thought of as a person's job, an individual's productive activity and contribution to the economy. Conversely, from the individual's view, work is the effort society exacts in return for the goods and services placed at the individual's disposal (Levitan & Johnston, 1973). Work seems to include a host of things: artists work on paintings, teachers work with young people, and builders construct homes (Terkel, 1974).

Work is the main focus of daily activities for most individuals. Obviously, the ability to purchase most goods and services is largely why people work (Terkel, 1974). Society's members have had the most powerful incentives to keep working, no matter what release from work they could collectively have reaped from productivity gains. Besides providing economic support, work offers opportunities for social interaction and a chance to use and enhance skills in a chosen area.

Sailor (1983) stated that a sense of productivity gained through work increases the quality of life. A person's self-worth improves by doing something that society values. Employment also helps individuals meet other people in which they may have things in common. Experiences with others that

result in friendship development will help an individual have a more complete and fuller life. Employment generates the respect of others and improves the quality of life (Terkel, 1974).

In the future, it seems evident that everyday life will continue to become more demanding. The nature of work will be different. Jobs will be more technically demanding, and many more jobs will be automated, thus, reducing the number of positions in manufacturing and agriculture (Patton, Smith, & Payne, 1990).

Money will still be the most important and pervasive "liberator" of workers. In the next few decades, higher incomes will grant broad discretion in work to an unprecedented number of individuals. As incomes rise individuals will be granted choices to convert high standards into greater control of their lives. For example, if a person is financially stable he may schedule times throughout the year not to work or to work only a few hours per week. Employment will always play a major role in life (Levitan & Johnston, 1973). In this section, three aspects of employment are addressed: (a) employment status of youth, (b) employment status of individuals with mild disabilities, and (c) societal cost of unemployment.

Employment Status of Youth

The last few years have seen a dramatic worsening of the labor market for young people (Junanker, 1987). In 1993, the Bureau of Labor Statistics reported a 17.4% unemployment

rate for individuals between 16 and 19 years old.

Unemployment has been explained in terms of a lack of aggregate demand, an increased supply of young people, a changing structure of the economy from industry to service, increased participation of married women taking part-time work in the service sector, and generous social security benefits (Junanker, 1987). Young people with disabilities also have a low employment rate, and for youths with mild disabilities, employment rates are lower still (50% - 75%) (Fourqurean & LaCourt, 1990; Kranstover, Thurlow, & Bruininks, 1989; Siegel, Robert, Waxman, & Ross, 1992; Sitlington, Frank, & Carson, 1992; Wise & Cherritta, 1987).

Employment Status of Individuals with Mild Disabilities

Persons with mild disabilities have specific learning disabilities, mild mental retardation, or behavior disorders (Meese, Overton, & Whitfield, 1993). A definition of each will follow.

Persons with specific learning disabilities have a disorder in the ability to learn effectively in respect to one's own potential when presented with an appropriate regular instructional environment. The inability to learn effectively is manifested as a disorder in an individual's ability to receive, organize, or express information relevant to school functioning, and is demonstrated by a significant discrepancy between aptitude and achievement in one or more of the following areas: preacademic skills, oral expression,

listening comprehension, written expression, basic reading skills, reading comprehension, mathematics calculation, and mathematics reasoning. This discrepancy shall not be primarily attributable to vision, hearing, or motor impairment; mental retardation; emotional disabilities; environmental, cultural, or economic disadvantage; or a history of an inconsistent education program (K.A.R. 91-12-22[rr]).

Individuals with mild mental retardation have a degree of retardation present when intelligence test scores are 50 to 55 to approximately 70. Individuals also have functional capabilities which can be developed to aid in interaction and decision making (K.A.R. 91-12-22).

Persons with behavior disorders have a condition with one or more behavioral characteristics that are (a) exhibited at either a much higher or lower rate than is appropriate for one's age; (b) documented as occurring over an extended period of time in different environmental settings within the school, home, or community, and (c) interfering consistently with the student's educational performance. This interference with educational performance shall not be a result of intellectual, sensory, cultural or health factors that have not received appropriate attention (K.A.R. 91-12-22 [c]).

The most widely shared characteristics of students with mild disabilities is academic difficulty, problems with social skills, and problems with vocational development

(Brolin, 1989; Hallahan & Kauffman, 1991; Lerner, 1993; Meese, Overton, & Whitfield, 1993; Mercer & Mercer, 1993). Students with mild disabilities are frequently educated in the regular education classroom, often with the special educator providing resource room assistance to the student or consultative services to the regular education teacher (Hallahan & Kauffman, 1991). Regular education or functional curricula are used for students with mild disabilities (Mercer & Mercer, 1993).

Each year approximately 200,000 students with mild disabilities leave public school hoping to find employment (Will, 1984). Researchers have conducted follow-up studies to determine the employment rate of persons with mild disabilities. One of the benefits of research on post-school adjustment of former students is that of providing educators, parents, and policy-makers with information with which to evaluate special education programs. More specifically, this information can be used in evaluating whether these programs prepare former students to adapt to adult roles. Such information adds to our understanding of students' transition from school to adulthood.

Descriptive Follow-up Studies

Halpren (1985) isolated three domains that he believed must be considered when assessing adult adjustment. They are employment, residential environment, and the social or interpersonal network maintained by a person. A review of

descriptive follow-up studies assessing the adult adjustment of persons with mild disabilities will follow.

Frank and Sitlington (1993) studied 322 Iowa graduates with mild retardation. Telephone interviews were conducted with former students 3 years after graduation from high school. Interviews gathered information on student background, general adult status, and current employment status. Interviews indicated that 72% of the former students were working either full or part-time. Of those employed, 54% were working in service vocations earning on the average \$4.22 per hour, and 10% were working as laborers earning \$3.85 per hour. The researchers also found that 81% of the graduates were single, and 62% were living with their parents.

Hoisch, Karen, and Franzini (1992) assessed the post-school outcomes of 30 California students with learning disabilities and 17 students with mild retardation. A nine-item telephone interview was conducted with former students to determine current employment status. Interview data indicated a 39% employment rate and an average hourly salary of \$4.25. The researchers also found that individuals were commonly employed in restaurants and retail stores working on the average 16 to 25 hours per week.

Schalock, Walzen, Ross, Elliott, Werber, and Peterson (1986) conducted a 5-year follow-up study of 65 students with learning disabilities and 43 students with mild retardation who had exited Nebraska public schools. Personal

interviews with former students were used to determine an individual's present employment status, current living environment, current primary source of income, and employment data. Interview data indicated that 63% were working in manufacturing, farming, and retail-trade jobs. Persons with learning disabilities had higher employment rates (72%) than persons with mild mental retardation (58%). Lack of employment opportunities resulted in individuals obtaining income from their parents and public assistance programs. The researchers also found that low productivity rates, inappropriate behavior, and poor physical appearance were reasons why individuals lost their job.

Mithaug, Horiuchi, and Fanning (1985) conducted a comprehensive study of 37 students with mild retardation, 32 students with learning disabilities, and 12 students with emotional disabilities who had exited Colorado special education programs in 1978 and 1979. The researchers developed an interview instrument consisting of five parts: (a) permission forms to conduct the interview and to gather background information from school records, (b) high school background information sheets, (c) responses to high school course work, (d) information on the student's job experiences after leaving school, and (e) information on the student's economic status in the community. Interview data indicated a 69% employment rate. Employed individuals on the average earned \$3.35 per hour. The researchers also found that 45% were in post-school education.

Succimarra and Speece (1990) studied 1984 graduates of the Washington, D.C. metropolitan area school system. A 59-item telephone interview was conducted with former students 2 years after graduation. The interview attempted to determine demographic information, employment history, and social adjustment of 60 students with learning disabilities, 6 students with mild retardation, and 2 students with emotional disabilities. The researchers found a 78% employment rate; 65% of those employed earned between \$3.36 and \$5.00 per hour. Also, 97% were single, and 83% were living with their parents.

Kranstover, Thurlow, & Bruininks (1989) examined the post-school success of 239 graduates with disabilities in a midwestern suburban school district, all of whom had received special education services for at least 1 year during high school and were classified as mildly retarded, learning disabled, and emotionally handicapped. A follow-up questionnaire was developed to obtain information in eight general areas: (a) leisure activities, (b) limitations on activities, (c) education, (d) employment, (e) financial independence, (f) school experiences, (g) special training, and (h) friendships. Questionnaire data indicated a 67% employment rate. Individuals were commonly employed as janitors, assemblers or builders earning on average \$6.30 per hour. Kranstover and his colleagues also found that for those employed, 45% located their job through their parents, relatives or friends.

The six descriptive follow-up studies reviewed used telephone interviews with former students and mail questionnaires to determine school background, current living environment, and the employment status of persons with mild disabilities. Professors, graduate students, and public school professionals conducted telephone interviews ranging in length from 9 - 57 questions.

Researchers found that former students with mild disabilities had an employment rate ranging from 39% - 78%, and an average hourly salary ranging from \$3.35 - \$6.30. Individuals who had been out of school for 2 or 3 years had higher employment rates (78% and 72%, respectively) than those out of school 5 years (63%). Succimarra and Speece (1990) and Frank and Sitlington (1993) also indicated that the majority (83% and 62%, respectively) were living with their parents. Table 1 details the subjects in each study, method of data collection, results, and study limitations.

An interpretation problem that occurs in descriptive follow-up studies of adults with mild disabilities is that there are no established criteria of what constitutes successful adult life. This composite variable may need to remain relative given the value judgment involved. How do you measure adult success?

Several factors limit the strength of descriptive follow-up data such as, small sample size, lack of reported instrument reliability and content validity, and an almost exclusive focus on specific groups of persons with

Table 1
Descriptive Follow-up Studies

Study	Subjects	Data Collection Method	Results	Study Limitations
Frank & Sitlington (1992)	Iowa graduates 322 persons with mild disabilities	Telephone interview with former students 3 years after graduation	72% employment rate \$4.22 average hourly salary	Do not specifically define sample No indication of interview questions
Holsch, Karen, & Franzini (1992)	California graduates 17 MMR 30 LD	A 9-item telephone interview with graduates	38% live independently 39% employment rate \$4.25 average hourly salary	No indication when interview was conducted Small sample size
Schallock et al. (1986)	Nebraska graduates 65 LD 43 MMR	Telephone interview with former students	63% employment rate	Do not indicate employment rate for specific disability category (LD, MMR, and ED) No information indicating when interview was conducted or its content

Table 1--continued

Study	Subjects	Data Collection		Results	Study Limitations
		Method			
Mithaung, Horiuchi, & Fanning (1985)	Colorado graduates 37 MMR 32 LD 12 ED	Telephone interview with graduates		69% employment rate \$3.35 average hourly salary	No information indicating when interview was conducted or its content Do not indicate employment rate for specific disability category (LD, MMR, and ED)
Succimarra, & Speece (1990)	Washington, DC 60 LD 2 ED	A 59-item telephone interview with former students 2 years after graduation		78% employment rate 83% live with parents	Length of interview Small sample size Do not indicate employment rate for specific disability (LD, MMR, and ED)

Table 1--continued

Study	Subjects	Data Collection		Results	Study Limitations
		Method			
Kranstover, Thurflow, & Bruinink (1990)	Midwest 239 persons with disabilities	Mail questionnaire to graduates		67% employment rate 45% located job through self, family, friend network	Do not specifically define sample (Midwest) Do not specifically indicate content of questionnaire Do not indicate employment rate for specific disability category (LD, MMR, and ED)

Key: LD = Learning Disabilities
MMR = Mild Mental Retardation
ED = Emotional Disabilities

disabilities. Also, a considerable portion of follow-up data is obtained through self-report of the people interviewed. Over time, too, economic conditions may change, which could affect the adult adjustment of persons with mild disabilities.

Comparison Follow-up Studies

Several researchers have compared the adult adjustment of nondisabled persons, persons with learning disabilities, mild mental retardation, and emotional disabilities. A review of comparison follow-up studies will follow.

As part of an Iowa Statewide Follow-Up Study, Sitlington, Frank, and Carson (1992) investigated the employment status of 737 learning disabled, 142 mildly retarded, and 59 emotionally disabled graduates of special education resource room programs. Interviews with graduates were conducted by work experience coordinators, consultants, school psychologists, and teachers from the student's school district 1 year after graduation. Information sought from interviews included: background (e.g., test scores from high school, disability label, program model); high school program (e.g., number of regular and special vocational education courses taken, extracurricular activities); current life circumstances (e.g., marital status, living arrangements, leisure activities); and past and current employment (job experiences during high school, location of job, salary, and hours worked). Where possible, interviews were conducted face-to-

face with the former student. When an individual could not be contacted either in person or by telephone, a parent or guardian was interviewed. Interview data indicated a 65% employment rate. The largest proportion of competitively employed persons were learning disabled (77%); lower employment rates were found for persons with emotional disabilities and mild mental retardation (58% and 62% respectively). The researchers found that persons receiving vocational training and work experience during high school had an 87% employment rate compared to an 71% employment rate for persons who did not receive vocational training or work experience. Also, 90% were single and 60% were living with their parents.

Hasazi, Johnson, Hasazi, Gorden, and Hull (1989) examined the employment status of 67 youth with emotional disabilities, mild retardation, learning disabilities, and 66 nondisabled youth who had graduated from Vermont schools during the 1986-1987 school year. Telephone interviews were conducted 2 years after graduation. Interview data indicated a 63% employment rate for persons with mild disabilities and a 82% employment rate for nondisabled persons. Hasazi and her colleagues also found that when compared to their nondisabled peers, persons with mild disabilities had lower wages, fewer fringe benefits, worked fewer hours, and were employed in less skilled jobs.

deBettencourt, Zigmond, and Thorton (1989) conducted a follow-up study of 44 students with learning disabilities and

64 nonlearning disabled students who attended a semi-rural school district at the foothills of the Blue Ridge Mountains in central Virginia. Semi-structured interviews were completed with subjects who had been out of school a minimum of 18 months. Four dimensions were probed in the interview: (a) demographic and family status information, (b) school-related information and perceptions, (c) current social adjustment information, and (d) employment and post-high school status and history. Interview data indicated a 74% employment rate for persons with learning disabilities; a 80% employment rate was found for persons who did not have a learning disability. The researchers also found that students who failed a grade in middle or high school had higher dropout rates and lower employment rates.

Richardson, Koller, and Katz (1988) studied the job histories of 154 persons with mild retardation and 52 normal intelligence quotient (IQ) persons who had graduated from a Midwest school district. The authors interviewed both the individual and the parents of the individual to determine employment rate, job type, and amount of take-home pay. Interview data indicated that 50% of persons with mild retardation were employed in unskilled jobs receiving minimum wage; 85% of nonretarded were employed receiving above minimum wage. The researchers conclude that when compared to their nonretarded peers, persons with mild retardation were more often unemployed, had higher turnover rates, and received lower pay.

Affleck, Edgar, Levine, and Kortering (1990) examined the differences and similarities in the accommodation to adult roles experienced by 75 former students with learning disabilities, 109 students with mild retardation, and 218 nondisabled students who had exited school districts in Washington State from 1983 to 1987. Parents were interviewed 6, 18, and 30 months after their children left school. The 15-minute interview gathered information on current employment status, employment history, hours of work and salary per week, job-search methods, and current living information. Interview data indicated that after 6 months out of school, nondisabled persons had a higher employment rate (73%) than persons with learning disabilities and mild retardation (65% and 41%, respectively). On average, employed individuals earned \$134 per week. The researchers also found that on all measures persons with mild retardation were lower than their nondisabled and learning disabled peers.

Neel, Meadows, Levine, and Edgar (1988) investigated the employment status of 160 students with behavior disorders and 542 nondisabled students. A 20-minute telephone interview was conducted with parents who had children exiting the Washington State education system between 1978 and 1986. Data collected included demographic information, post-school education, employment status and history, weekly hours of employment and salary, how jobs were obtained, post-school residential history, and use of community

services. Interview data indicated a 60% employment rate for graduates with behavior disorders compared to a 73% employment rate for nondisabled graduates. Neel and his colleagues also found that 17% of graduates with behavior disorders were participating in post-secondary training compared to a 47% post-secondary participation rate for nondisabled graduates.

Researchers have studied school records and conducted face-to-face telephone interviews with former students and their parents to determine the differences in adult adjustment among nondisabled persons, and persons with learning disabilities, behavior disorders and mild mental retardation. Interviews are commonly conducted by work experience coordinators, graduate students, school psychologists, and teachers in an attempt to gather information on employment status, post-school education, hours of work and salary per week, and current residence.

Researchers have found that nondisabled persons had an employment rate ranging from 73% - 85%. Persons with mild disabilities had an employment rate ranging from 50% - 74%. When compared to their nondisabled peers, persons with mild disabilities had lower wages, fewer fringe benefits, worked few hours, and were employed in less skilled jobs. When comparing the employment rates of persons with learning disabilities, mild mental retardation, and emotional disabilities, higher employment rates were found for persons with learning disabilities (77%) followed by persons mild

emotional disabilities (62%), and persons with mild mental retardation (58%). When compared to their peers with learning disabilities and emotional disabilities, persons with mild mental retardation were more often unemployed, had higher turnover rates, and received lower pay. Also, deBettencourt and his colleagues, and Sitlington and her colleagues indicated higher employment rates for persons with mild disabilities who participated in high school vocational courses. Table 2 details the content of comparison follow-up studies.

Several factors limit the strength of comparison group follow-up data such as, unequal comparison group sizes, sample attrition, and an undefined study sample. Also, a considerable portion of follow-up data is obtained from interviews that are not clearly reported or described in research studies.

Follow-up Studies Examining Transition Programs

The major question that follow-up research poses is how does secondary special education affect the lives of adults with disabilities? To answer this question researchers have attempted to identify components of secondary transition programs that facilitate employment, living, and leisure opportunities for persons with disabilities. A review of follow-up studies analyzing transition programs will follow.

Haring, Lovett, and Smith (1990) examined the post-school success of 64 New Mexico graduates with learning

Table 2
Comparison Follow-up Studies

Study	Comparison Groups	Data Collection Method	Results	Study Limitations
Sitlington, Frank, & Carson (1992)	Iowa graduates 737 LD 59 BD 142 MR	School record analysis	Employment rate LD 77% MD 62% BD 58%	Interview content and length not clearly indicated
		Personal interviews with graduates 1 year after graduation	80% located job through self, family, friend network 90% single	Unequal comparison group sizes
Hasazi et al. (1989)	Vermont graduates 67 LD, MR, and BD 66 nondisabled	School record analysis	Employment rate ND 82% MD 63%	Mild disabilities categories not clearly defined
		Telephone interviews 2 years after graduation	ND twice as likely to be employed full-time	Interview content and length not clearly indicated
				Interview content not clearly indicated

Table 2--continued

Study	Comparison Groups	Data Collection Method	Results	Study Limitations
Neel, Meadows, Levine, & Edgar (1988)	Washington graduates BD 160 ND 542	Parent telephone interviews	Employment rate BD 60% ND 73% Postsecondary participants BD 17% ND 47%	Interview content and length not clearly indicated Interview content not clearly indicated
			Unengaged (not working or going to school) BD 31% ND 81%	Study participants refused to provide information (Salaries)
deBettencourt, Zigmund, & Thorton (1989)	Virginia graduates LD 44 ND 64	Personal semi-structured interviews 18 months after graduation	Employment rate LD 74% ND 80%	Study sample definition (semi-rural) Interview content and length not clearly indicated (semi-structured?)

Table 2--continued

Study	Comparison Groups	Data Collection Method	Results	Study Limitations
Richardson, Koller, & Katz (1988)	Midwest graduates MMR 154 ND 52	Personal interviews with graduates and parents	Employment rate MMR 50% ND 85% MMR minimum wage ND above minimum wage	Study sample definition (Midwest) Interview content and length not clearly indicated
Affleck, Edgar, Levine, & Kortering (1990)	Washington graduates LD 75 MMR 109 ND 218	School record analysis Telephone interviews with parents: 6, 12, and 18 months after graduation	Employment rate ND 73% LD 65% MMR 41% Average salary \$134 per week	Sample size attrition Interview content and length not clearly indicated
Key:	LD = Learning Disabilities			
	MMR = Mild Mental Retardation			
	MD = Mild Disabilities			
	ND = Nondisabled			
	ED = Emotional Disabilities			

disabilities. Individuals participated in a work-study program as part of a self-contained special education program. Former students were interviewed by phone to solicit information on employment status, employment and training history, and use of social service agencies. Interview data indicated 38 were employed earning on the average \$77 weekly. Of those employed, 48% located their job by themselves or through a friend or family member. The researchers also found that 79% were living with their parents.

Hasazi, Gorden, and Roe (1985) examined the employment status of 462 youth who had graduated, or dropped out of Vermont schools between 1979 and 1983. Of the 462 youth, 296 were emotionally disabled, learning disabled, and mildly retarded. A 44-item telephone interview was designed to solicit information from students on their current occupation, employment history, post-secondary education and vocational training experiences, social service utilization, and current marital and residential status. Interview data indicated 55% were employed. Of those employed, 87% obtained their job by themselves or through a friend or family member. The percentage employed varied significantly with location of employment, with 44% rural employment, 64% urban employment, and 47% metropolitan employment. The researchers also found that high school vocational courses and work experience increased employment rates. For example,

a 69% employment rate was found for individuals who had high school vocational courses and work experiences.

Fardig, Algozzine, Schwartz, Hensel, and Westling (1985) studied the employment status of 113 persons who were educationally classified as either learning disabled, mildly retarded, or emotionally disabled. An employment questionnaire was designed to obtain the former rural Florida students current employment status, position, length of time on the job, wages, and previous employment status. Questionnaire data indicated that 58% were employed earning on the average \$134 per week. The researchers also found that the former rural students received very little vocational course work and training during high school.

Wise and Cherritta (1987) studied the employment status of 415 Delaware special education graduates, all of whom were classified as either emotionally disabled, mildly retarded, or learning disabled during high school. Telephone interviews with graduates were used to gather information on current employment status, type of job, how jobs were located, and vocational class participation. Interview data indicated a 62% employment rate. Those employed commonly located their job by themselves or with the help of friends or family members. The researchers also found that individuals who participated in vocational courses and had work experiences during high school had a 77% employment rate.

Siegel, Robert, Waxman, and Ross (1992) studied the post-secondary life of youth with mild disabilities and evaluated the effectiveness of the San Francisco Unified School District Career Ladder Program (CLP). The CLP is based on the belief that all citizens should have access to career development, in which they can grow and be challenged in their jobs. Three components support the CLP mission: (a) a semester-long supervised work experience during the senior year of high school, (b) an Employment Skills Workshop curriculum, and (c) post-secondary services provided by CLP transition specialists, in collaboration with the California Department of Rehabilitation. A 20-minute telephone interview was conducted with 82 graduates with learning disabilities and 10 graduates with mild retardation to determine current employment status and hourly wage. Interview data indicated a 80% employment rate; on the average individuals earned \$5.80 per hour. The researchers also found that graduates were satisfied with CLP and the transition services they received during high school.

Neubert, Tilson, and Ianacone (1989) studied the employment status of 30 students with learning disabilities and 36 students with mild retardation. Each student had participated in the federally funded Job Training and Tryout (JT & T) program in Maryland. The JT & T was delivered in several phases: (a) initial client intake, (b) 8-week employability skills course, (c) two job tryouts, (d) structured job search support, (e) competitive job placement,

(f) job club, and (g) job change and advancement support. A quarterly employer questionnaire and biweekly site visits indicated that 64% of JT & T participants were employed 1 year after initial job acquisition. Individuals were commonly employed part-time in clerical and sales jobs earning an average of \$4.40 per hour. Also, 35% of participants received medical insurance as an employee benefit.

Summary of Follow-up Studies Examining Transition Programs

Researchers have used mail questionnaires and telephone interviews to determine the success of public school transition programs. Telephone interviews commonly are conducted by graduate students, and school professionals in an attempt to gather information on employment status, post-secondary training, use of social service agencies, and vocational training experiences. Table 3 summarizes follow-up studies examining transition programs.

Telephone interview and questionnaire data indicated that individuals with mild disabilities who participated in the Career Ladder Vocation Program had higher employment rates and salary than individuals who participated in the Job Training and Tryout Program, work study programs, resource room special education programs, and rural special education programs.

Hasazi, Gorden, and Roe (1985), and Haring, Lovett, and Smith (1990) obtained differences relative to gender in their follow-up studies examining transition programs. These

Table 3
Follow-up Studies Examining Transition Programs

Study	Subjects	Data Collection Method	Results	Study Limitations
Haring, Lovett, & Smith (1990)	New Mexico graduates LD 64 Participated in work-study program	Telephone interview with graduates	60% employment rate 35% participating in postsecondary training 79% living with their parents	Study sample not clearly defined Components of work-study programs are not detailed When interview was conducted was not indicated
Hasazi, Gordon, & Roe (1989)	Vermont graduates 296 persons with mild disabilities Participated in resource room program	Telephone interview with graduates	55% employment rate 64% living with their parents 83% located job through self, family, friend network	Length of interview Lacks important definitions such as, rural, urban, and metropolitan

Table 3--continued

Study	Subjects	Data Collection Method	Results	Study Limitations
Siegel, Robert, Waxman, & Ross (1992)	California graduates LD 82 MR 10	Telephone interview with graduates	80% employment rate \$5.80 average hourly wage 45% employed part-time	Only one vocational program studied Do not define length and content of telephone interview
Neubert, Tilson, & Ianacone (1989)	Maryland graduates LD 30 MR 36 Participated in Job Training and Tryout Program	Employer questionnaire Biweekly site visits	64% employment rate \$4.40 average hourly wage 52% changed jobs in the first year of program 35% received medical insurance as an employee benefit	Do not detail questionnaire content or data collected from biweekly site visits Only one vocational program studied

Table 3--continued

Study	Subjects	Data Collection Method	Results	Study Limitations
Fardig et al. (1985)	Florida graduates 113 persons with mild disabilities Participated in rural special education program	Mail questionnaire	58% employment rate Average salary \$134 per week	Do not indicate the number in each category of mild disabilities Specific information regarding questionnaire is not provided (Question content and return rate)
Wise & Cherritta (1987)	Delaware graduates 415 persons with mild disabilities Participated in resource room special education program	Telephone interviews with graduates	62% employment rate 81% located job by themselves, family, or friends 77% employment rate for persons who participated in high school vocational programs	Resource room education program not clearly defined Specific content and length of interview not clearly indicated
Key: LD = Learning Disabilities MMR = Mild Mental Retardation ED = Emotional Disabilities				

differences suggest that females have adjusted less well to adult life than males in terms of employment. First, a higher proportion of females than males were unemployed among persons with behavior disorders, learning disabilities, and mild mental retardation. Second, females were employed in jobs that were less desirable than those held by males in several important ways. The mean wage per hour was substantially less for females than males in all three disability groups. Females were also more often employed part-time than were males. Also, a smaller proportion of females than males were receiving job benefits such as, health insurance and vacation time. A more concentrated effort is needed to study transition programs to determine if program opportunities are different based on gender.

Several factors limit the strength of follow-up studies examining transition programs. For instance, transition program components are not commonly detailed in follow-up research. A lack of a comparison group also limits the reliability and validity of follow-up studies that examine a specific transition program. Also, researchers commonly do not detail the length or content of questionnaires or interviews used to collect follow-up data.

Societal Costs of Unemployment

Vast societal costs result from the unemployment of persons with mild disabilities. Unemployed individuals rely on three public assistance programs for financial support: Supplemental Security Income (SSI), Medicaid, and food

stamps. SSI is a federal income maintenance program for persons prevented from gainful employment by physical or mental impairments (Schloss, Wolf, & Schloss, 1987). Individuals who qualify for SSI also qualify for Medicaid. Persons with mild disabilities who have assets less than \$2000 and income less than \$596 per month also qualify for food stamps.

Cost-benefit analyses have been conducted to determine the societal benefits of employment. Cost-benefit analysis involves calculating the total cost of the program and comparing it to the total program benefits (Rhodes, Ramsing, & Hill, 1987). Five major tasks make up a benefit-cost accounting framework, including (a) defining the program and the standard to which it will be compared, (b) specifying the analytical perspectives to be adopted, (c) listing the specific benefits and costs, (d) estimating the shadow prices (the prices used to value the various outcomes), and (e) determining the appropriate techniques for assessing benefits and costs that occur at different times (Thorton, 1985). Information gained from cost-benefit analyses help taxpayers, consumers, and governmental agencies to identify financial outcomes associated with services, what the related costs are and how costs compare to other services (Hill, Banks, Wehman, Hill, & Schafer, 1987). Cost-benefit analyses have been conducted for special education employment programs.

Lewis, Bruninks, Thurlow, and McGrew (1988) conducted a cost-benefit analysis of a hypothetical public school special

education employment program. Graduates of programs for students with mild retardation were examined. Employed individuals will pay taxes and will not rely on social service agencies for financial assistance. The researchers found that over their lifetime, employed individuals with mild retardation will contribute \$667,927 to the societal tax base.

Hill and Wehman (1983) conducted a cost-benefit analysis of a 4-year supported employment program. Variables used in the cost-benefit analysis were work duration, number of staff hours spent with clients, estimated expenditures by clients, tax credits, SSI, program costs, state and federal taxes, consequences to taxpayer, and financial benefit to the individual. Data were placed in three financial benefits categories: increased revenue, decreased service expenditure, and decreased government subsidy. Hill and Wehman found that \$530,300 spent on the 4-year employment program resulted in the generation of \$620,576; a net societal benefit of \$90,300. Over 20 years, society will gain \$1,806,000 from supported employment programs.

Hill, Banks, Handrich, Wehman, Hill, and Schafer (1987) also conducted a cost-benefit analysis of a special education employment program. Both consumer and taxpayer perspectives were used in the analysis. Consumer data indicated for every \$1 relinquished in taxes and SSI, \$1.97 was received in income, an income gain of \$3894 per year per consumer. If

employed for 30 years, an individual with mild disabilities would financially gain \$116,820. The researchers also found for every taxpayer \$1 spent on employment programs, society gained \$1.87. Over 30 years, society would approximately gain \$261,000 by financially supporting special education employment programs.

Cost-benefit analyses have found that society benefits when it financially supports special education employment programs. Over 20 to 30 years, society will gain between \$261,000 and \$1,800,600 with the employment of persons with disabilities. Also, special education employment programs help individuals gain \$3894 in gross income per year.

The next section of this chapter considers the transition of individuals with mild disabilities from school to local community employment. Attention is given to career education and vocational training.

Transition

The transition from school to adult life and the world of work is full of complexities for everyone. For all students, successful negotiation of this transition requires varying degrees of assistance from friends, family, and school personnel (Lerner, 1993).

Hallahan and Kauffman (1991) stated for students with mild disabilities, much of the concern centers on attempting to meet their academic as well as their vocational needs. Teachers of secondary students are constantly faced with the

decision of how much to stress academics versus vocational preparation. Because their disabilities are milder, many students with learning disabilities, mild mental retardation, and emotional disabilities are able to go on to post-secondary educational institutions, such as community colleges or universities. It is often difficult to tell whether to steer students with mild disabilities toward a college preparatory or more vocational oriented curriculum (Hallahan & Kauffman, 1991).

Successful transition of individuals into the community is dependent upon the quality and appropriateness of both the high school curriculum and the transition services that are provided to help the student accomplish his or her goals (Benz & Halpern, 1987). In this section, three aspects of transition are addressed: (a) transition legislation, (b) career education, and (c) vocational training.

Transition Legislation

Recent follow-up studies confirm that although schools are attempting to educate students with mild disabilities to enable them to become members of the adult community, a large number have had limited opportunities to acquire vocational competencies (Hasazi & Clark, 1988). A lack of vocational competencies cause students with mild disabilities to have high unemployment rates.

As a result of these concerns, Congress enacted several pieces of legislation to provide greater vocational opportunities for young adults. Specifically, the 1983

Amendments to the Education of the Handicapped Act authorized funding for the support of model demonstration programs to strengthen and coordinate education, training, and related services to assist youths with disabilities in the transition from school to adult life. Another piece of important legislation, the Carl Perkins Vocational Education Act of 1984, includes a provision that requires that all students with disabilities and their parents be informed of the vocational programs offered through vocational education and the accompanying entry requirements prior to the beginning of the ninth grade. In addition, the act provides for counseling services designed to facilitate the transition from school to post-school employment and career opportunities as well as adaptation of curriculum, instruction, equipment, and facilities. Finally, the act requires local vocational education programs to assure equal access to the full range of vocational program modifications for students with disabling conditions (Cobb & Larkin, 1985).

The Education of the Handicapped (EHA) Amendments of 1990 added transition to the Individuals With Disabilities Education Act (IDEA). Transition services were defined as: a coordinated set of activities for a student, designed with an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community

participation (Hallahan & Kauffman, 1991). The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation (Sec. 602 [a] [19]). Each individual education plan is required to have a statement of the needed transition services for students beginning no later than age 16 and annually thereafter (and, when determined appropriate for the individual, beginning at age 14 or younger), including, when appropriate, a statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting (Sec. 602 [a] [20]). With the federal initiative and federal mandate for transition services has come an increase in career education and vocational training (Hallahan & Kauffman, 1991).

Career Education

Career education has the broad purpose of preparing students in a general way for the world of work (Lerner, 1993). This education is the totality of all experiences through which students learn about and prepare to engage in work as a part of their way of living.

Career education includes instruction in the phases of career awareness (jobs available in society); career exploration (the skills and competencies needed in various

careers and vocation); and career preparation (more specific training and preparation for the world of work). For example, in the elementary grades students would be introduced to a variety of jobs in the community. During middle school, students would identify requirements to perform chosen jobs, and in high school they would receive training to perform those jobs.

Throughout the student's school experience, teachers can stress career education by teaching good work habits and interpersonal skills and by requiring students to complete assignments, meet deadlines, work independently, and be punctual (Brolin, 1989).

Razeghi, Kokaska, Gruenhagen, and Fair (1987) stated that career development for individuals with mild disabilities is a sequential, life-long learning process that begins at the earliest level of education. During educational programming, students learn the academic, daily living, personal-social, occupational competencies, and specific vocational skills necessary for attaining their highest level of economic, personal, and social fulfillment. These competencies and skills are obtained and demonstrated during five progressive stages: awareness, exploration, preparation, assimilation, and continuing education.

Initially in the awareness stage, individuals are given opportunities to become familiar with the attitudes, information, and self-understanding necessary to the values of a work-oriented society. For example, elementary school

teachers would discuss available community vocations as part of a social studies lesson. Secondly, the exploration stage includes opportunities for one to investigate the aptitudes, interests, and requirements necessary to fulfill various paid and unpaid work roles. For instance, if a student was interested in being a nurse, the student would identify personal and professional requirements to be a nurse. Thirdly, the preparation stage includes opportunities to acquire and practice attitudes and skills that qualify one for paid and unpaid work roles. Fourthly, the assimilation stage includes opportunities to adapt to the demands and rewards of one's work roles. Finally, the continuing education phase includes opportunities to seek change in knowledge and abilities that provide success in one's work roles (Razeghi, Kokaska, Gruenhagen, & Fair, 1987). Teachers during the preparation, assimilation, and continuing education phase may invite guest speakers to the class or take students on field trips to given vocational sites.

Vocational Training

This form of preparation is training for a specific job (such as auto mechanics or food services). Vocational training also focuses on a number of dimensions beyond the job itself: banking and using money, grooming, caring for a car and obtaining insurance, interviewing for jobs, and using leisure time. Adjustment to the work world involves adapting to the demands of life as well as to a specific job (Kirk & Gallagher, 1989).

Vocational training programs try to build a set of vocational skills progressively over time, drawing a variety of social agencies into the educational activities. Fundamental activities and skills are taught in a special class setting. For example, high school students with mild disabilities would take a prevocational or community living class to learn important work related skills. Finally, with the help of vocational rehabilitation, attempts are made to provide a useful work experience in either a sheltered workshop facility or a competitive employment setting.

The next section of this chapter considers transition education programs. Attention is given to education curriculums, transition models, employment models, and education change.

Transition Programs

Educators have developed transition programs. The goal of transition programs is to help individuals with mild disabilities gain meaningful employment, live in their local community, and use community resources to participate in leisure activities (Meese, Overton, & Whitfield, 1993; Hallahan & Kauffman, 1991; Patton, Smith, & Payne, 1990). Transition program objectives stress the importance of a functional secondary school curriculum that provides experience in integrated community job sites, systematic coordination between the school and adult service providers, parental involvement and support, and a written individualized transition plan to guide the entire process

(Hasazi & Clark, 1988). In this section, three aspects of transition education programs are addressed: (a) curriculum, (b) transition models, and (c) employment models.

Curriculum

Brolin (1986) developed the Life-Centered Career Education (LCCE) curriculum. LCCE is based on 22 competencies and almost 100 sub-competencies across three major domains: daily living skills, personal/social skills, and occupational guidance and preparation. A sample of the many competencies include managing family finances, utilizing recreation and leisure, selecting and planning occupational choices, and achieving independence. Competencies and subcompetencies are infused into the regular curriculum, whenever possible, as well as into practice activities at home and in the community. Currently, LCCE has been adopted by numerous school districts across the United States and has also received support from the Council of Exceptional Children (Meese, Overton, & Whitfield, 1993).

LaQuay (1981) developed the Adult Performance Level (APL) curriculum for life skills preparation. The APL is a two-dimensional model that integrates basic skills (reading, writing, speaking, listening, viewing, interpersonal relations and computation) into the functional skills, termed content/knowledge domains, needed for daily living (consumer economics, occupational knowledge, health, community resources, government and law). Skills developed through APL provide a foundation for competitive employment. Kimeldorf

and Edwards (1988) developed a job search education curriculum. Students with mild disabilities are trained to locate and obtain meaningful employment. During their first 2 years of high school, students join a job club to locate and gather information on community jobs. For example, individuals learn to use newspapers to locate jobs and to determine requirements for obtaining the job. During their last 2 years of formal training, students fill out job applications and interview for jobs.

Clark and Kolstoe (1990) developed School-Based Career Development and Transition Education. This career-education model infuses career-education concepts and skills into the special and regular education curriculum. Beginning in the preschool years and continuing through adulthood, the following areas are given special emphasis: (a) values, attitudes, and habits essential for work; (b) human relationships on the job, in the family, and in the community; (c) occupational information, including various occupational roles, occupational vocabulary, occupational alternatives, and basic realities about the world of work; and (d) job-acquisition and daily living skills appropriate for current and future needs. For instance, elementary students with mild disabilities would be informed of available community jobs and throughout their middle and high school years would learn skills to perform and maintain given vocations.

Education curriculums have been developed to facilitate the successful transition of students with mild disabilities into community employment, living, and leisure opportunities. Curriculums contain learning experiences that help students learn important skills such as, reading, writing, and computation. Brolin (1986) and LaQuay (1981) also stressed the importance of daily living skills for eventual competitive employment. Also, Kimeldorf and Edwards (1988), and Clark and Kolstoe (1990), indicated time periods in which important employment skills should be taught.

Transition Models

Wehman, Kregal, and Barcus's (1985) model for school-to-work transition involves three stages: the secondary school curriculum, the transition planning process, and placement in meaningful employment. Wehman and his colleagues consider three characteristics critical to good secondary school programs. First, the curriculum must stress functional skills; that is, students must learn vocational skills that they will actually need and use in local employment situations. Second, school-based instruction must be carried out in integrated settings as much as possible. For example, individuals with and without mild disabilities who want to be firemen would receive vocational training together in a fire station. Students with mild disabilities must be given ample opportunities to learn the interpersonal skills necessary to work effectively with nondisabled workers and peers in integrated work sites. Third, community-based instruction

should begin as early as about age 12 and must be used for progressively extended periods as the student nears graduation. While on work sites in the community, students should receive direct instruction in areas such as specific job skills, ways to increase production rates, and transportation to and from employment sites.

Development of career awareness and vocational skills should begin in the elementary years. Elementary students might sample different types of jobs through classroom responsibilities such as watering plants, cleaning chalkboards, or taking messages to the office. Young children with disabilities might also visit community work sites where adults with disabilities are employed.

During middle school students begin to spend time at actual community job sites, with an increasing amount of in-school instruction devoted to the development of associated work skills, such as being on time, staying on task, and using interpersonal skills (Egan, Fredericks, & Hendrickson, 1985). Secondary students would spend an increasing amount of time receiving instruction at actual community job sites.

The second stage of this transition model, the development and implementation of an individualized vocational transition plan for every student with mild disabilities, is the key element in the transition process. Input from both students and parents and interagency cooperation are critical to an early planning effort that

results in a formalized plan identifying school, community, and home responsibilities. Wehman, Kregal, and Barcus (1985) also recommend that an individual transition plan be written 4 years prior to a student's graduation and that the plan be reviewed and modified as necessary at least once each year until the young adult has adjusted successfully to a post-school vocational placement. The third and final stage of the transition model, multiple employment alternatives, must be available if the school-to-work transition effort is to result in meaningful outcomes. Students with mild disabilities are provided paid and unpaid work experiences in a variety of vocational settings. For example, during high school students may work for 6 weeks at a convenience store, convalescent home, hospital and a factory.

Test (1987) detailed the Competitive Employment Through Vocational Experience (CETVE) transition model. Secondary students are provided supervised competitive work experience in conjunction with job coaching and written transition plans.

The five phases in CETVE include (a) identifying students who are disabled that need services; (b) screening identified students to determine initial employment skills and deficits; (c) placing students in a competitive work experience; (d) training students on-the-job; and (e) providing follow-along services to ensure job retention. For example, each individual has a transition plan that indicates vocational placement and the level of support needed for the

individual to succeed on the job. Gradually, support is removed and the individual functions independently on the job.

The Hawaii Transition Project (1987) is a multi-year project that encourages active parent participation in planning post-school options for individuals with mild mental retardation. A key feature of the project is the individualized transition plan (ITP). The ITP coordinates community services to promote opportunities for students to obtain competitive employment.

During the first year of a student's enrollment in the Hawaii Transition Project, school representatives, parents, and the student identify potential post-secondary services and placements and begin to match the student's needs with available community resources. In the middle years, active transition planning occurs. School representatives and a transition team conduct vocational assessments and determine appropriate community agency referrals. Together, the parents and the student investigate enrollment in community agencies, while school representatives and the transition team review programming implications and initiate individual education plan planning to support the transition plan. In the final years, school representatives, parents, the student, and adult service providers facilitate transition planning through such activities as arranging cooperative programming, identifying transition coordination

responsibilities, and finalizing enrollment of the student in an appropriate post-secondary education program or work setting (Patton, Smith, & Payne, 1990). For example, for individual students with mild retardation parents and school representatives identify community jobs that may be appropriate for the student. An individual transition plan is then developed to facilitate the acquisition of skills necessary to perform the chosen vocation.

Kerachsky and Thornton (1987) detailed the Structured Training and Employment Transitional Services (STETS) model. STETS was implemented in five major cities. The program is conducted in three phases over an 18-month period: (a) initial training and support services in a low-stress work environment; (b) on-the-job training in local companies and agencies, with an emphasis on job performance and work stress; (c) 6 months of follow-up services for workers who made the transition to competitive employment. For instance, during high school a student with mild disabilities is placed in a community job and provided support to succeed on the job. School personnel then work with the local employer to help the individual maintain the job as an adult. The STETS has been successfully implemented for persons with mild disabilities in five major cities (Kirk & Gallagher, 1989).

Coker and Costello (1989) studied the Community Center Transition Model (CTC). The CTC emphasizes secondary transition programs, work experiences, school and community

employment networks, and a community center. The community center provides a location to organize transition programming in rural communities. For instance, rural school districts who do not have transition curriculums call the community center for services. At the community center, transition professionals provide employment preparation training, respond to the local need for transition services, and pool resources among schools, adult service providers, and employers. Community centers provide services that help students with mild disabilities gain meaningful employment.

Transition models have been developed to guide education programs for students with mild disabilities. Table 4 details the curriculum, educational setting, and components found in five transition models used throughout the United States.

Wehman and his colleagues (1985) detail the importance of a functional curriculum that includes real-life learning experiences. Test (1987), and Kerachsky and Thornton (1987) agree with Wehman that students with disabilities should be educated in integrated settings with their nondisabled peers. Components of transition models commonly include individual transition plans, high school work experiences, community agency planning, and parental participation.

Employment Models

Wehman, Moon, and McCarthy (1986) identified five options for employment models: (a) adult activity centers

Table 4
Transition Models

Name	Curriculum	Educational Setting	Model Components
Wehman, Kregal, & Barcus (1985)	Functional K-12	Integrated with nondisabled in community settings	Individual transition plans Multiple employment alternatives in high school
Competitive Employment Through Vocational Experience, Test (1987)	Not indicated	Integrated with nondisabled on the job	Individual transition plans Professional support on the job
Hawaii Transition Project (1987)	Functional K-12	Not indicated	Individual transition plans Community agency vocational planning Parental participation throughout

Table 4--continued

Name	Curriculum	Educational Setting	Model Components
Structured Training and Employment Transition Services, Kerachsky & Thornton (1987)	Vocational 9-12	Integrated with nondisabled in community settings	On-the job training Job placement Professional follow-up support
Community Center Transition Model, Coker & Costello (1989)	Vocational 9-12	Community center in rural communities	Work experiences School and community employment networks

and sheltered workshops; (b) supported employment; (c) supported competitive employment; (d) enclaves in industry; and (e) mobile work crews. Adult activity centers provide recreation, instruction in daily living skills, and opportunities to develop work skills. In contrast, sheltered workshops provide work experiences for which clients are paid. Both tend to be segregated facilities that emphasize the buildings not the staff. For instance, the adult activity center and sheltered workshop provide a central location where individuals with disabilities are transported to participate in a variety of social, work, and leisure activities.

The foundation of supported employment are paid employment, integration into the community, necessity for ongoing support, and presence of disability. Emphasis is on structured assistance in job placement and job site training. For example, an individual with mild disabilities would be placed in a community job and would receive support from a job coach to learn the skills to perform the job independently. Enclaves involve groups of disabled clients working under supervision in a business or industry. Mobile work crews perform (under supervision) at different locations within a building or community (Wehman & Melia, 1985).

Rusch and Hughes (1990) described four supported employment models: (a) individual placement; (b) clustered or enclave placement; (c) mobile work crew; and (d) entrepreneurial. In the individual placement model, an

employment specialist places the individual with a business in the private sector. The employment specialist provides on-site training that is gradually reduced as the worker is able to function on the job more independently.

The other three models involve groups of no more than eight people with disabilities and are designed for persons unable to assume as much independence as those under the individual placement model. All three involve ongoing supervision by an employment specialist. In the clustered, or enclave model, groups are organized around specific contract services, such as janitorial work. In the entrepreneurial model, groups provide a specific service product to businesses in the community (Rusch & Hughes, 1990).

Summary of Employment Models

Employment models have been developed to provide opportunities for persons with mild disabilities. Wehman and his colleagues (1986) outlined employment programs for persons with mild disabilities. Each program emphasizes paid employment, integration into the community, and ongoing support to persons with mild disabilities. Rusch and Hughes (1990) also stressed the importance of on-site job training and ongoing supervision by employment specialist.

Employment models that contain a number of employment options benefit individuals with mild disabilities. Interagency collaboration along with ongoing professional support increase the employment rate of persons with mild

disabilities (Rusch & Hughes, 1990; Trach & Rusch, 1989; Wehman & Melia, 1985; Wehman, Moon, & McCarthy, 1986).

Benefits of Transition Programs

Students with mild disabilities benefit from transition programs. For example, Hasazi, Gorden, Roe, Hull, Finck, and Salembier (1989) in a follow-up study of 67 students with mild disabilities found that students who had taken one or more vocational classes or worked during high school were 33% more likely, in the future, to be employed, than youth who had not had experiences.

Siegel, Robert, Waxman, and Ross (1992) also examined the impact of transition programs for students with mild disabilities. Interview data from 84 San Francisco graduates found that students who had transition programs had increased employment rates, wages, and benefits.

Several transition programs have been developed. Researchers have found that transition programs that contain parental participation, multi-year curriculums, individual transition plans, interagency collaboration, and employment models increase the employment rate of persons with mild disabilities (Brolin, 1986; Clark & Kolstoe, 1990; Patton, Smith, & Payne, 1990; Rusch & Hughes, 1990).

Transition programs increase the social and economic status of students with mild disabilities (Fourqurean, Meisgeier, Swank, & Williams, 1991). Wages earned allow individuals to live independently in the community and

participate in leisure activities (Succimarra & Speece, 1990). The current study will provide valuable information to train professionals to design transition programs that benefit students with mild disabilities.

Education Change

In order for changes to occur in education information needs to be obtained on current education practices. All change is based on the application of information or knowledge (Bennis, Beane, & Chin, 1985). A brief discussion on organization and individual change theories will follow.

Organization Change Theory

Lewin (1951) conceptualized an effective change process as having three stages: (a) the unfreezing of the present level of a group's life or culture, (b) movement to a new level, and (c) the refreezing of the new level. Subsequent authors have described these three phases as initiation, implementation, and institutionalization (Eiseman, Fleming, & Roody, 1990).

The initiation phase involves planning and preparation for an innovation's use. Needed training and materials are obtained, and announcements of the new practice are made. During the implementation phase members of the organization use the innovate practice. Activities during this phase include problem-solving with the use of the practice, further training and coaching, minor modifications of the practice, and measurement of the impact of the implementation. The

institutionalization phase involves actions that embed the new practice into the daily operation of the organization and legitimization within the greater community.

Institutionalization has occurred when an organization has allocated time and money and has successfully created expectations, structures, and procedures for widespread use of the innovation (Villa, Thousand, Stainback, & Stainback, 1992).

Sergiovanni (1990) indicated that change requires "value leadership," where the leadership, whether it be parents, teachers, community members, or administrators seek a fair return to the school from teachers and students for its investments in them. Investments are in the form of financial, psychological, social and educational benefits that the school provides. The returns sought from teachers and students are the time and effort needed to make the school work.

Sergiovanni's first stage of initiation involves the creation of a feeling of belonging and union among leaders and followers through leadership's "bartering" responses to the security, social, ego, and physical needs of the followers. The second stage of uncertainty involves the building of support among leaders and followers. The third transformation stage requires leaders to inspire and bond together school personnel through appeals to the intrinsic human need for purpose and significance in one's work and life. The last stage, routinization is conceptualized as a

banking effort. Banking seeks to make improvements automatic so human effort and resources are conserved.

Deal and Peterson (1990) defined change methods as any actions that make more visible or help to alter the customs, traditions, expectations, norms, and habits that shape the beliefs, feelings, and practices of members of the school community. The researchers recommend (a) studying, codifying, and passing on the school's history and norms, (b) including every stakeholder group in the formulation and clarification of the school's mission, (c) welcoming rather than withdrawing from resistance and conflict, (d) hiring new staff who believe in the new practice, innovation, or vision, (e) supporting or creating ceremonies and traditions that celebrate the new practice, innovation, or vision.

Kimbrough and Burkett (1990) also indicated ways to use information to promote change. Information can be used to (a) determine if there is a need for change, (b) promote the idea, (c) decide to change, and (d) give credit to those who change.

Information helps to develop innovative ideas to change organizations. Researchers who have studied organization change indicate the importance of strong leadership and a systematic process to facilitate the implementation of innovative ideas. Also, researchers have indicated the importance of an ongoing information gathering system to monitor innovative ideas in complex organizations.

Individual Change Theory

Theories have also been developed to facilitate changes in individuals who work in organizations. For example, Etzioni (1966) discussed the psychological and gradualist theories of change. The psychological approach attempts to influence people by indicating the benefits of the change for them and society. For instance, how a penny sales tax for road maintenance will help individuals cut their car maintenance costs and how their streets will be safer. In the gradualist strategy of change a step-by-step process is used to promote change. For instance, a new innovative idea may be implemented over a long period of time rather than all at once.

Researchers who have studied organization and individual change stress the importance of information. The more reliable and valid the information the more likely the change will occur. Change commonly occurs through a systematic process over a given period of time. Information is the springboard for all organizations and individuals to change (Etzioni, 1961; Toffler, 1990).

Education Change Theory

Villa, Thousand, Stainback, and Stainback (1992) described four phases needed to reform or change education. The four phases include (a) visioning, (b) introducing, (c) expanding, and (d) selectively maintaining change and change processes.

Initially, the visioning phase involves the creation and communication of a compelling vision of a desired state of affairs, a vision that clarifies the current situation and introduces a commitment to the future (Bennis & Nanus, 1985). Two types of vision drive effective changes within schools. The first type of vision concerns organizational excellence. Organizational excellence is the creation of the best, most effective school or school district possible. The second type of vision universal vision, extends beyond the local school organization and toward the protection of fairness, equity, and the victory of right over wrong in education (Sheive & Schoenhelt, 1987).

The second phase of a school change effort involves introducing the change. The desired outcomes of this phase are to unfreeze current practices and to get people to believe that system-wide change will occur. The most important aspect of the introduction phase is that people notice the change. Everything is done with sufficient drama and flair that people believe things are going to change (Schlechty, 1990).

The third phase of the change effort involves expanding the change. During the expanding phase the objective is to expand to the vast majority, the number of people engaged in behaviors that represent the desired future and to transform the culture so that change agents and others share a covenant or a moral commitment to the new way (Thousand, Villa, Stainback, & Stainback, 1992). To attain these objectives,

leadership must communicate an expectation that everyone will receive needed training and coaching.

Finally, the selectively maintaining change and change process phase involves continuing the innovative idea and providing opportunities to evaluate the impact of the innovation. Evaluation of the innovation is ongoing with modifications made as needed.

In special education, the federal government commonly passes legislation to promote institutionalized change (Chubb & Moe, 1990). For example in 1990, the federal government responded to low employment rates and increasing social service agency expenditures by adding transition to the Individuals with Disabilities Education Act. The goal of the transition requirements are to increase the likelihood that school-aged students with disabilities gain the skills needed to obtain competitive employment, independent living, and participate in community leisure activities (Hallahan & Kauffman, 1991).

Currently, very little transition information exists on the nature and extent of state and local implementation of the transition requirements of the Individuals with Disabilities Education Act (Research in Education, 1993). Information is needed in order to study local school district transition policies, programs, and university teacher training programs. The current study is a valuable one as it will add to the transition knowledge base. In the future, results of the current study along with other transition

research may result in the development of innovative ideas to change transition policies, programs, and university teacher training programs.

Summary

Most students with mild mental retardation, and some students with learning disabilities and emotional disabilities, will probably always be at a disadvantage in competing with their peers. Many simply lack the requisite skills to compete, or come from families or settings that do not provide the supports needed to become a competent adult. The challenge before educators is to simultaneously pursue two goals. Initially, educators must develop restructured secondary education programs that better prepare these students to become productive citizens. Second, educators must advocate for the social support and resources these students need in order to make a successful transition to adult life.

Currently, individuals with mild disabilities have low employment rates. Low employment rates cause them to depend on their family or social service agencies for financial support. Higher employment rates are needed for persons with mild disabilities.

One way to increase the employment rate of persons with mild disabilities is to increase the current knowledge base concerning transition education programs. A lack of transition program information may cause persons with mild

disabilities not to receive proper education experiences. For example, educators who are unaware of transition education programs may spend an inordinate amount of time on academic tasks rather than having an equal balance between academics and vocational programming. Increased knowledge will act as a springboard to change existing transition programs and to provide more services to students with mild disabilities. Increased transition knowledge will also help teacher training institutions identify the transition needs of future teachers of students with mild disabilities. Also, after a review of transition legislation, it is evident that the federal government places a high priority on the successful transition of individuals with mild disabilities into competitive employment.

Research using a systematic data collection procedure is needed to collect information on transition education programs. The current study will analyze the knowledge level of teachers and administrators on the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476). Information obtained will help educators plan training to help increase the quality of transition education programs.

CHAPTER 3 METHODS

The purpose of this study was to determine the current status of transition programs. Kansas teachers and administrators were surveyed to determine their knowledge level of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476).

In Chapter 3, the methods and procedures of the study will be presented. Initially, the null hypothesis and sampling procedures are presented, followed by the methods involved in the production of the questionnaire. An overview of the statistics employed in the analysis of the data is provided. Finally, the chapter is summarized.

Null Hypotheses

The following null hypotheses were tested at the .05 level of confidence:

H1: There will be no statistically significant difference among elementary, middle, and high school teachers' of students with mild disabilities knowledge of transition.

H2: There will be no statistically significant difference among elementary, middle, and high school administrators' knowledge of transition.

H3: There will be no statistically significant relationship between elementary teachers' transition

knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H4: There will be no statistically significant relationship between middle school teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H5: There will be no statistically significant relationship between high school teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H6: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H7: There will be no statistically significant relationship between middle school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H8: There will be no statistically significant relationship between high school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

H9: There will be no statistically significant relationship between elementary school teachers' transition knowledge and the number of years of instructional experience they have.

H10: There will be no statistically significant relationship between middle school teachers' transition knowledge and the number of years of instructional experience they have.

H11: There will be no statistically significant relationship between high school teachers' transition knowledge and the number of years of instructional experience they have.

H12: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the number of years of administrative experience they have.

H13: There will be no statistically significant relationship between middle school administrators' transition knowledge and the number of years of administrative experience they have.

H14: There will be no statistically significant relationship between high school administrators' transition knowledge and the number of years of administrative experience they have.

Prior to subject selection, permission to conduct survey research with teachers and school administrators was sought. The necessary permission was obtained from the University of Florida Institutional Review Board. The board required submission of the investigator's plan for the study as well as a copy of the instrument and cover letter.

Subject Description

The population of this study was drawn from Kansas' 1281 public elementary and secondary teachers of students with mild disabilities and 1225 public elementary and secondary principals. A random sample of 150 teachers and 150 principals was selected from the 1993-1994 Kansas Department of Education Public Schools data bank. The initial sample distribution of teachers and principals included in the study is shown in Table 5.

Table 5
Initial Sample Distribution

Position	E	M	H	Total
Principal	80	20	50	150
Teacher	88	5	57	150
Total	168	25	107	300
School Level Code: E = Elementary School M = Middle School H = High School				

The sample size for the study was based on two rationales. First, power analysis was conducted to determine the minimum number of subjects necessary to find an effect if present (Cohen & Cohen, 1983). Second, the number was increased to offset the effects of nonrespondents in survey studies (Bruininks, Wolman, & Thurlow, 1990).

Using the formula and table (E.2) described by Cohen and Cohen (1983), the investigator projected the final sample

size necessary to insure a 90% chance of finding a medium effect size with alpha set at .05. Cohen's formula, used for determining sample size is

$$n^* = L/f2 + k + 1$$

where L is a number drawn from table E.2 on the basis of (a) the number of independent variables under consideration (k), (b) a preset alpha of .05, (c) a pre-specified medium ($f2 = .15$) effect size (Cohen, 1988), and (d) the desired level of power is .90. In this case $L = 20.53$, and the number of independent variables is 10 so that

$$n = \frac{20.53}{15} + 10 + 1 = 147.08$$

a minimum total of 148 (rounded to next whole person) subjects was established under the first rationale.

The second rationale for determining the sample size was based upon published return rates (number of respondents divided by total number of subjects included in the initial sample) for survey research in the field of special education (Bruininks et al., 1990). Bruininks and his colleagues reported return rates ranging from 57% to 91%. In addition, Best (1993) suggested following these guidelines for response rates in educational research: 50% adequate, 60% good, 70% very good. The minimum sample total ($n = 148$) was therefore increased for a projected return rate of 50%. The resulting 298 subject group was further increased to 300 to maintain equal group size in the stratification process. A total of 150 teachers of students with mild disabilities and 150 school administrators were included in the initial sample.

Distribution of respondents and their characteristics are presented in Table 6 and 7.

Table 6
Teacher Respondent Characteristics

School Level	Number	Mean Education Level	Mean Years of Experience
Elementary School	52	1.73	12.43
Middle School	3	1.33	6.33
High School	37	1.78	16.86
Education Level Code: 1 = Bachelor's 2 = Master's 3 = Doctorate			

Table 7
Administrator Respondent Characteristics

School Level	Number	Mean Education Level	Mean Years of Experience
Elementary School	35	2.00	11.06
Middle School	13	2.09	15.92
High School	22	2.05	10.52
Education Level Code: 1 = Bachelor's 2 = Master's 3 = Doctorate			

Instrumentation

The instrument used for the study was a questionnaire, a copy which is included in Appendix A. The instrument was designed to be self-administered. The questionnaire was composed of two sections. The first section included items concerning personal characteristics and professional

background, presented in fixed-response or free-response formats. The second section contained items that measured transition knowledge. The transition items were presented in the fixed-response, multiple-choice format.

The first section of the instrument was created to collect information about respondents to be used as assigned variables. Assigned variables are those where intervention is limited to classification, selection, and assignment (Kennedy & Bush, 1985). These items were reviewed for clarity by professors in the Department of Special Education at Pittsburg State University, Pittsburg, Kansas. Items in this section addressed the respondents' background and experience. Results from this section allowed the investigator to describe the samples of teachers and administrators.

The second section comprised 20 multiple-choice items and was planned to sample important aspects of the federal laws, transition programs, and community resources that effect special education students. Items were written to establish knowledge of (a) IDEA, and the Supreme Court's interpretation of its substantive provisions; (b) transition models; and (c) components of transition programs. The transition score, assigned on the basis of total correct responses on this section, was used as the dependent variable for this investigation.

The transition questions were developed from an item specification table. Content areas, listed previously, were

selected on the basis of representation in two current textbooks, Rusch's Transition From School to Adult Life (1992) and Clark and Kolstoe's Career Development and Transition Education for Adolescents With Disabilities (1990). Additional consideration was given to current transition issues since publication of the two texts.

The transition items in section two of the questionnaire were sent to five special education transition experts for review. These individuals were selected on the basis of publications and/or recommendations of doctoral committee members. The transition experts were (a) requested to read the transition items for clarity and content, (b) asked to judge the representative of the sample, and (c) invited to suggest improvements. The nature of the study was disclosed to the experts, and they were asked to validate the content of individual items as well as the overall instrument based upon their knowledge of special education transition. Following this content validation process, all of the 20 items were deemed representative of special education transition components.

Prior to using the questionnaire in the study, certain consistency measures were considered. The instrument was administered twice to two separate groups of graduate students enrolled at Pittsburg State University. The first group was made up of students enrolled in a special education methods course during the spring of 1994. The second group included students seeking general administrator certification

who were enrolled in a special education administration during the spring of 1994. Each group was asked to complete the questionnaire on two occasion (1 week apart). Questionnaires were coded to allow matching each respondent's first and second responses. A test-retest reliability coefficient $r = .92$ was obtained and judged adequate for the purposes of this study.

Using the responses from the first administration to each group, internal consistency was established. Internal consistency is used frequently to provide an estimate of reliability for instruments that will only receive one administration (Best, 1993). In this case, the Kuder Richardson 20 was used to project reliability. Reliabilities of .90 are considered acceptable for behavioral science and education applications (Best, 1993). The resulting coefficient of .91 was, therefore, deemed sufficient to ensure internal consistency.

Finally, the instrument was piloted on three non-education professionals, 10 teachers of students with mild disabilities, and 10 public school administrator. Following the results of the pilot study and the recommendation of one committee member, two different forms (administrator and teacher) of the questionnaire were developed. The 14-item revised teacher and administrator questionnaire was then piloted on 10 teachers of students with disabilities and 10 school administrators who were participating in graduate courses at Pittsburg State University, Pittsburg, Kansas.

Following the pilot study, an item debriefing session was conducted with a psychology professor, special education professor, school administrator, education graduate student, and an undergraduate student. Feedback from the debriefing session resulted in changes to individual questionnaire items. A teacher and administrator item specification table is presented in Table 8 and 9.

Table 8
Teacher Questionnaire Item Specification Table

Subject Area	# of Item	% of Item
IDEA and Courses	6	43
Transition Models	2	14
Transition Components	6	43
Total	14	100

Measures of consistency were considered to determine the reliability of the Special Education Transition Questionnaire. Test-retest reliability, with a 1-week time interval, was found to be sufficient ($r = .92$). Internal consistency, using the Kuder Richardson 20 was above the recommended acceptable rate ($r = .91$). Content validity was established through the use of expert review.

Description of the Procedures

Initially, the 150 teachers of students with mild disabilities and 150 principals were randomly selected and identified by school name and address only. Packets were

Table 9
Administrator Item Specification Table

Subject Area	# of Item	% of Item
IDEA and Courses	9	64
Transition Models	3	21
Transition Components	2	15
Total	14	100

prepared for distribution. Each packet contained (a) a cover letter (a copy of which is located in Appendix A), (b) the questionnaire, and (c) a postage-paid return envelope.

The packets were mailed directly to the schools and addressed to the attention of the principals and teachers. Using the school name only to contact potential subjects and numerically coding the response forms allowed the investigator to assure teachers and principals that their identities would remain unknown. Subjects were assured in the cover letter that school identification would be kept confidential.

Twelve days after the first mailing, a postcard reminder was sent to each teacher and principal who had not yet responded. The postcard, located in Appendix A, expressed appreciation for participation in the survey. A follow-up letter, also located in Appendix A, and additional questionnaires were mailed to teachers and principals from

which no responses were received 3 weeks after the initial date.

Treatment of the Data

Data collected from the background and transition sections of the questionnaire were analyzed. Each of the hypotheses was addressed through the use of an analysis of variance. Cohen and Cohen (1983) stated that this type of analysis may be used whenever a quantitative variable (the dependent variable) is to be studied, as a function of, or in relationship to, any factors of interest (independent variables).

In this study, the dependent variable was the transition score. Multiple independent variables or factors were considered; role (teacher or administrator), level of training in transition, and years of experience in education. Using analysis of variance, the hypotheses were tested using F-ratios for the variables' individual contribution to the transition score.

Each of the 14 null hypotheses and the specific procedures used to accept or reject them based upon analysis of variance are presented:

H1: There will be no statistically significant difference among elementary, middle, and high school teachers' of students with mild disabilities knowledge of transition.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H2: There will be no statistically significant difference among elementary, middle, and high school administrators' knowledge of transition.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H3: There will be no statistically significant relationship between elementary teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H4: There will be no statistically significant relationship between middle school teachers' transition knowledge and type of preparation (bachelor's, master's, or doctorate) they received.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H5: There will be no statistically significant relationship between high school teachers' transition knowledge and type of preparation (bachelor's, master's, or doctorate) they received.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H6: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the type of preparation (bachelors, masters, or doctorate) they received.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H7: There will be no statistically significant relationship between middle school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H8: There will be no statistically significant relationship between high school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H9: There will be no statistically significant relationship between elementary school teachers' transition knowledge and the number of years of instructional experience they have.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H10: There will be no statistically significant relationship between middle school teachers' transition knowledge and the number of years of instructional experience they have.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H11: There will be no statistically significant relationship between high school teachers' transition knowledge and the number of years of instructional experience they have.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H12: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the number of years of administrative experience they have.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H13: There will be no statistically significant relationship between middle school administrators' transition knowledge and the number of years of administrative experience they have.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

H14: There will be no statistically significant relationship between high school administrators' transition knowledge and they number of years of administrative experience they have.

If the resulting F-ratio was significant at the .05 level, the null hypothesis was rejected.

Summary

The methods and procedures used in conducting the study were presented in this chapter. This included identification

of the subjects and how they were located. The procedure used in collection of data was discussed. Additionally, the design of the study and the means of analyzing the data were presented.

CHAPTER 4 RESULTS

The purpose of this investigation was to determine whether Kansas administrators and teachers of students with mild disabilities had knowledge of special education transition. Data acquired through the use of two different Special Education Transition Questionnaires were compiled and analyzed using the Macintosh Stat View program. This chapter presents the findings of this investigation.

Following a discussion of the overall model and its use, the chapter is divided into eight sections based upon the research questions posed in Chapter 1. Section topics include (a) the extent to which teachers of students with mild disabilities were able to respond correctly to multiple choice questions concerning special education transition, (b) a comparison of elementary, middle, and high school teachers of students with mild disabilities responses, (c) the extent to which school administrators were able to respond correctly to multiple choice questions concerning special education transition, (d) a comparison of elementary, middle, and high school administrators' responses, (e) the relationship of level of preparation of teachers of students with mild disabilities to knowledge of special education transition, (f) the relationship of level of preparation of school administrators to knowledge of special education transition,

(g) the relationship of teachers of students with mild disabilities experiences and background to knowledge of special education transition, and (h) the relationship of school administrators' experiences and background to knowledge of special education transition. Within these sections the corresponding hypotheses proposed in Chapter 3 and the analyses conducted to determine whether to accept or reject them are presented.

Statistical Model

Analysis of variance was selected for the analyses in this investigation because the method allowed for comparisons between individuals within chosen groups. The quantitative dependent variable was studied in relationship to a number of independent variables that were quantitative in nature.

Teachers Correct Responses to Questionnaire Items

The question posed for this section read: Do elementary, middle, and high school teachers of students with mild disabilities have knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)? Of the 150 teachers selected to participate in the study, 92 completed the questionnaire (61% return rate). A total of 14 special education transition items were developed for the survey. On the average, teachers were able to respond correctly to 6.60 items (45%). When studying transition subject areas, teachers answered the least amount of items correct in the category of IDEA and court decisions (42%) followed by transition components

(43%), and transition models (55%). Other observations indicated that only 11% of teachers had knowledge of life-skills curriculum, and 23% of teachers had knowledge of the responsibilities schools have in implementing the transition requirements of IDEA. Each item and the corresponding percent of elementary, middle, and high school teachers who correctly responded to it are shown in Table 10.

Table 10
Percent of Correct Teacher Responses

Subject Area	Percent Responding Correctly to Specific Items			
	E n = 52	M n = 3	H n = 37	All n = 92
IDEA and Court Decisions				
1. Transition Services	42	33	46	43
4. Age Requirements	63	66	84	72
11. School Responsibilities	31	66	08	23
13. Transition on IEPs	48	0	43	45
14. IEP Team	31	0	16	24
Transition Models				
8. Role of Parents	63	100	73	68
12. Transition Readings	44	0	46	43
Transition Components				
2. Transition Objectives	46	33	54	49
3. Career Education Stages	54	66	54	54
5. Individual Transition Plans	46	100	62	54
6. Life-Skills Curriculum	13	0	11	11
7. Career Education Definition	56	33	81	61
10. Individual Transition Plan	31	0	32	30
Average Total Percent of Correct Responses	44	45	48	45
School Level Code: E = Elementary School M = Middle School H = High School				

Eight questions were answered by less than 50% of study respondents. The requirements of the Individuals with Disabilities Education Act impacting transition services, interagency linkages, individualized education programs, and life-skills curriculum were beyond the frame of reference for most respondents. Among the six questions answered by more than 50% of study respondents were characteristics of transition programs such as, the role of parents in exemplary transition models, age of transition onset, individual transition plans, and general knowledge of the definition of career education.

Comparison of Elementary, Middle, and High School Teachers Responses

The question related to this section was, Do elementary, middle, and high school teachers of students with mild disabilities differ in their knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)? One hypothesis was established to respond to this question:

H1: There will be no statistically significant difference among elementary, middle, and high school teachers' of students with mild disabilities knowledge of transition.

An analysis of variance was conducted to determine the variability in scores among the three groups of teachers. The analyses involved a 2 (position) x 3 (school level) design using the transition score as the dependent measure.

The observed main effect for position and school level were not significant (6.355 and 3.991, respectively). No significant interaction was found between position and school level. Therefore, the null hypothesis is accepted in the current study.

Indepth consideration was also given to descriptive statistics when considering this question. Middle school teachers were removed from the descriptive analysis due to a small sample size ($n = 3$). While the overall comparison of teachers was not significant, the sorting of teachers into position yielded additional information (see Table 11). When all mean teacher responses are compared, it is evident that high school and elementary teachers had similar scores.

Table 11
Mean Score of Teachers of Students with Mild Disabilities

<u>Position</u>	<u>Number</u>	<u>Mean</u>	<u>Minimum</u>	<u>Maximum</u>
Elementary School	52	6.35	2	11
Middle School	3	5.67	4	7
High School	37	7.03	3	10

School Administrators Correct Responses to Questionnaire Items

The question posed for this section read: Do elementary, middle, and high school administrators have knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)? Of the 150 administrators selected to participate in the study, 70

responded to the questionnaire (46% return rate). A total of 14 special education transition items were developed for the survey. On the average, school administrators were able to respond correctly to 5.17 items (33%). When studying transition subject areas, administrators answered the least amount of items correct in the category of IDEA and court decisions (23%) followed by transition models (48%), and transition components (55%). Other observations indicated that administrators had very limited knowledge in the role of special education (3% correct), interagency linkages (12% correct), and the school's responsibility in implementing the transition requirements of IDEA (3% correct). Each item and the corresponding percent of elementary, middle, and high school administrators who correctly responded to it are shown in Table 12.

Twelve questions proved to be too difficult for the majority of the respondents. Overall, respondents were not knowledgeable because their scores were below 50% on each of these items: the requirements of the Individuals with Disabilities Education Act impacting transition services, individualized education programs, school responsibilities, interagency linkages, and the role of special education. The two questions that 50% responded correctly to were exemplary transition models and career education.

Table 12
Percent of Correct Administrator Responses

Subject Area	Percent Responding Correctly to Specific Items			
	E n = 35	M n = 13	H n = 22	All n = 70
IDEA and Court Decisions				
1. Transition Services	21	38	31	28
2. Age Requirements	32	62	40	40
5. School Responsibilities	0	15	0	03
6. Role of Special Education	0	0	10	03
7. Carl Perkins	26	46	20	30
9. Transition Definition	50	38	30	27
11. Transition on IEPs	15	54	15	22
12. Transition Goals	44	54	30	42
14. Interagency Links	15	08	10	12
Transition Models				
4. Exemplary Models	85	77	70	79
8. Role of Administrator	26	23	05	34
13. Amendments to EHA	38	31	30	34
Transition Components				
3. Career Education Definition	68	92	85	78
10. Content of IEPs	32	30	24	33
Average Total Percent of Correct Responses	32	30	24	33
School Level Code: E = Elementary School M = Middle School H = High School				

Comparison of Elementary, Middle, and High School
Administrators Responses to Questionnaire Items

The question related to this section was, Do elementary, middle, and high school administrators differ in their knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)? One hypothesis was established to respond to this question:

H2: There will be no statistically significant difference among elementary, middle, and high school administrators' knowledge of transition.

An analysis of variance was conducted to determine the variability in scores among the three groups of teachers. The analyses involved a 2 (position) x 3 (school level) design using the transition score as the dependent measure. The observed main effect for position and school level were not significant (6.286 and 3.991, respectively). No significant interaction was found between position and school level. Therefore, the null hypothesis is accepted in the current study.

Indepth consideration was also given to descriptive statistics when considering this question. While the overall comparison of administrators was not significant, the sorting of administrators into position yielded additional information (see Table 13). When all mean administrator responses are compared it is evident that administrators obtained similar scores.

Table 13
Mean Scores of Administrators

Position	Number	Mean	Minimum	Maximum
Elementary School	35	5.46	1	9
Middle School	13	5.46	3	8
High School	22	4.55	1	8

Comparison of Teachers and Administrators Transition
Knowledge

Two different questionnaires were developed for the current study. However, seven questions were included both on the teacher and administrator questionnaire. The seven multiple-choice question stems included (1) based on your experiences, exemplary transition models . . . , (2) in your opinion, to implement the IDEA transition requirements . . . , (3) in your opinion, the Individuals with Disabilities Education Act (IDEA) refers to transition as . . . , (4) in your opinion, transition services should be based upon . . . , (5) in your opinion, the Individuals with Disabilities Education Act (IDEA) states that transition services should begin no later . . . , (6) in your opinion, career education refers to . . . , (7) in your opinion, in order to satisfactorily comply with the transition requirements outlined in Section 1401 of IDEA, the individual education program (IEP) team must. . . . On five of the seven items, teachers had a greater percentage of correct responses than administrators. Those items dealt with knowledge of the transition requirements of the Individuals with Disabilities Education Act. Administrators had a greater percentage of correct answers on questions relating to the role of parents in exemplary transition models, and the definition of career education (see Figure 1).

The seven items were further analyzed to compare the percent correct on each item for elementary and high school

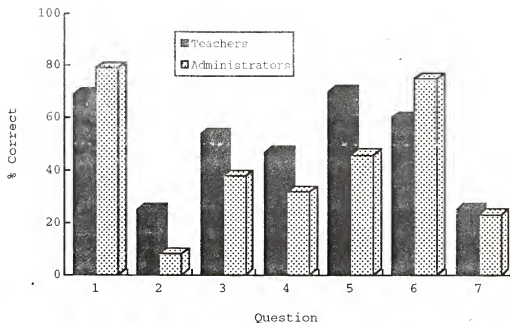


Figure 1. Comparisons of items answered correctly by teachers and administrators.

teachers, and elementary and high school administrators. Figure 2 details the percent correct for each item. When comparing elementary and high school teachers, high school teachers had a higher percent correct on each of the seven items. Also, when comparing high school and elementary administrators, high school administrators had a higher percent correct on three of the seven items.

Relationship of the Level of Preparation of Teachers to Knowledge of Special Education Transition

The question posed for this section required three separate hypotheses. Does the level of preparation (bachelors, masters, or doctorate) of elementary, middle, and high school teachers of students with mild disabilities correlate with the level of knowledge of the transition

requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

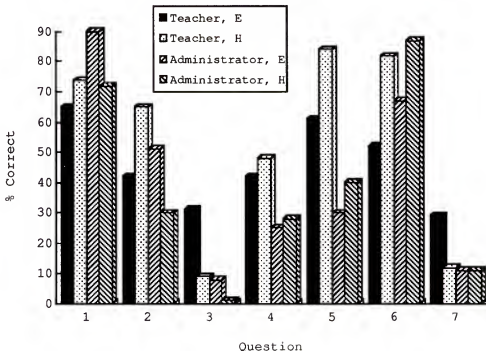


Figure 2. Comparison of teachers' and administrators' correct responses.

The first hypothesis considered is as follows:

H3: There will be no statistically significant relationship between elementary teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

A Spearman rho (ρ) correlation coefficient was conducted to determine if a relationship existed between elementary teachers' education level (bachelor's, master's, or doctorate) and transition score. The Spearman rho (ρ) correlation coefficient was .23. A low positive relationship

existed between elementary school teachers' education level and transition score.

The second hypothesis considered is as follows:

H4: There will be no statistically significant relationship between middle school teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

Due to a small sample size ($n = 3$) a Spearman rho (p) correlation coefficient could not be computed for the variable education level. The null hypothesis can neither be accepted or rejected in the current study.

The third hypothesis considered is as follows:

H5: There will be no statistically significant relationship between high school teachers' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

A Spearman rho (p) correlation coefficient was conducted to determine if a relationship existed between high school teachers' education level (bachelor's, master's, or doctorate) and transition score. The Spearman rho (p) correlation coefficient was $-.32$. A low negative relationship existed between high school teachers' education level and transition score.

Relationship of the Level of Preparation of School Administrators to Knowledge of Special Education Transition

The question posed for this section required three separate hypothesis. Does the level of preparation

(bachelor's, master's, or doctorate) of elementary, middle, and high school administrators correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

The first hypothesis considered is as follows:

H6: There will be no statistically significant relationship between school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

A Spearman rho (p) correlation coefficient was conducted to determine if a relationship existed between elementary administrators' education level (bachelor's, master's, or doctorate) and transition score. The Spearman rho (p) correlation coefficient was $-.45$. A moderate negative relationship existed between elementary school administrators' education level and transition score.

The second hypothesis considered is as follows:

H7: There will be no statistically significant relationship between middle school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

A Spearman rho (p) correlation coefficient was conducted to determine if a relationship existed between middle school administrators' education level (bachelor's, master's, or doctorate) and transition score. The Spearman rho (p) correlation coefficient was $.17$. A low positive relationship

existed between middle school administrators' education level and transition score.

The third hypothesis considered is as follows:

H8: There will be no statistically significant relationship between high school administrators' transition knowledge and the type of preparation (bachelor's, master's, or doctorate) they received.

A Spearman rho (p) correlation coefficient was conducted to determine if a relationship existed between high school administrators' education level (bachelor's, master's, or doctorate) and transition score. The Spearman rho (p) correlation coefficient was .33. A low positive relationship existed between high school administrators' education level and transition score.

Relationship of Teachers Experience and Background to Knowledge of Special Education Transition

The question posed for this section required three hypotheses. Does the number of years of instructional experience of elementary, middle, and high school teachers of students with mild disabilities correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)?

Experience was equated with years as a teacher. Years of experience was addressed by the ninth hypothesis:

H9: There will be no statistically significant relationship between elementary school teachers' transition

knowledge and the number of years of instructional experience they have.

A dummy code was developed to create different categories of years of experience. The dummy code included

- G1 - 1-5
- G2 - 6-10
- G3 - 11-15
- G4 - 16-20
- G5 - 21-25
- G26 - 26 and above

An analysis of variance was conducted to determine the variability in scores among the elementary school teachers. The analysis involved a 2 (position) x 6 (experience categories) design using the transition score as the dependent measure. The observed main effects for position and experience categories were not significant (3.451, and 4.212, respectively). No significant interaction was found between position and years of experience. Therefore, the null hypothesis is accepted in the current study.

The second hypothesis was considered as follows:

H10: There will be no statistically significant relationship between middle school teachers' transition knowledge and the number of years of instructional experience they have. Due to a small sample size ($n = 3$) an analysis of variance could not be computed for the variable years of experience. The null hypothesis can neither be accepted or rejected in the current study.

The third hypothesis was considered as follows:

H11: There will be no statistically significant relationship between high school teachers' transition knowledge and the number of years of instructional experience they have. A dummy code was developed to create different categories of years of experience. The dummy code included

- G1 - 1-5
- G2 - 6-10
- G3 - 11-15
- G4 - 16-20
- G5 - 21-25
- G26 - 26 and above

An analysis of variance was conducted to determine the variability in scores among the high school teachers. The analysis involved a 2 (position) x 6 (experience categories) design using the transition score as the dependent measure. The observed main effects for position and years of experience were not significant (4.908 and 2.788, respectively). No significant interaction was found between position and years of experience. Therefore, the null hypothesis is accepted in the current study.

Relationship of School Administrators Experiences and Background to Knowledge of Special Education Transition

The final section of this chapter involves three of the hypotheses established in Chapter III. The question put forth stated: Does the number of years of administrative experience of elementary, middle, and high school

administrators correlate with the level of knowledge of the transition requirements of the Individuals with Disabilities Education Act (P.L. 101-476)? Experience was equated with years as an administrator. Years of experience was addressed by the twelfth hypothesis:

H12: There will be no statistically significant relationship between elementary school administrators' transition knowledge and the number of years of administrative experience they have.

A dummy code was developed to create different categories of years of experience. The dummy code included

- G1 - 1-5
- G2 - 6-10
- G3 - 11-15
- G4 - 16-20
- G5 - 21-25
- G26 - 26 and above

An analysis of variance was conducted to determine the variability in scores among the elementary school administrators. The analyses involved a 2 (position) x 6 (experience categories) design using the transition score as the dependent measure. The observed main effects for position and years of experience were not significant (3.486, and 3.905, respectively). No significant interaction was found between position and years of experience. Therefore, the null hypothesis is accepted in the current study.

The second hypothesis was considered as follows:

H13: There will be no statistically significant relationship between middle school administrators' transition knowledge and the number of years experience they have.

A dummy code was developed to create different categories of years of experience. The dummy code included

- G1 - 1-5
- G2 - 6-10
- G3 - 11-15
- G4 - 16-20
- G5 - 21-25
- G26 - 26 and above

An analysis of variance was conducted to determine the variability in scores among the middle school administrators. The analyses involved a 2 (position) x 6 (experience categories) design using the transition score as the dependent measure. The observed main effects for position and years of experience were not significant (3.766 and 1.771, respectively). No significant interaction was found between position and years of experience. Therefore, the null hypothesis is accepted in the current study.

The third hypothesis was considered as follows:

H14: There will be no statistically significant relationship between high school administrators' transition knowledge and the number of years of administrative experience they have.

A dummy code was developed to create different categories of years of experience. The dummy code included

- G1 - 1-5
- G2 - 6-10
- G3 - 11-15
- G4 - 16-20
- G5 - 21-25
- G26 - 26 and above

An analysis of variance was conducted to determine the variability in scores among the high school administrators. The analyses involved a 2 (position) x 6 (years of experience) design using the transition score as the dependent measure. The observed main effects for position and school level were not significant (3.766 and 1.771, respectively). No significant interaction was found between position and years of experience. Therefore, the null hypothesis is accepted in the current study.

Summary of Findings

The purpose of Chapter 4 was to present the findings of the current study. Data obtained through two Special Education Transition Questionnaires were compiled and analyzed. Analysis of variance was used to compare differences between groups of school administrators, and differences between groups of teachers of students with mild disabilities. Relevant results were discussed in eight main sections corresponding to the research questions posed in Chapter 1.

Teachers of students with mild disabilities responded correctly to 45% of the 14 questions developed to assess knowledge of special education transition. Only three questions were answered correctly by more than 60% of the participants. These questions involved the definition of career education, exemplary transition models and transition age requirements. Questions regarding the implementation of the transition requirements of IDEA, transition services, transition definition, individualized education programs, interagency linkages, and components of transition programs were difficult for the majority of respondents.

No significant differences were found between the responses of teachers. While not considered in the overall model, mean scores of high school and elementary teachers of students with mild disabilities were similar.

School administrators responded correctly to 33% of the 14 questions developed to assess knowledge of special education transition. Only two questions were answered correctly by more than 43% of the participants. These questions involved the definition of career education, and exemplary transition models. With an established study criteria of 60%, questions regarding the transition requirements of IDEA, transition services, age requirements, school responsibilities, individualized education programs, interagency linkages, and transition models were difficult for the majority of respondents.

No significant differences were found between school administrators. While not considered in the overall model, mean scores of elementary and middle school administrators were the same (5.46).

Analysis of the data revealed that none of the four factors (position, school level, education level, and years of experience) originally included in the study were . significantly related to the dependent variable for either the group of teachers or group of school administrators.

CHAPTER 5 DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Although persons with disabilities have gained access to public school education programs since the early seventies through Section 504 of the Vocational Rehabilitation Act of 1973 and earlier versions of the Individuals with Disabilities Education Act, they have had limited vocational success as adults. For example, researchers who have conducted follow-up studies have found a 39% to 78% employment rate for persons with mild disabilities (Fourqurean & LaCourt, 1990; Haring, Lovett, & Smith, 1990; Kranstover, Thurlow, & Bruininks, 1989; Succimarra & Speece, 1990). Low employment rates commonly cause persons with disabilities to live with their parents and participate in few leisure activities.

In 1991, the federal government responded to low employment rates by adding transition to the Individuals with Disabilities Education Act (P.L. 101-476). The federal government defined transition services as a coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education adult

services, independent living or community participation (Hallahan & Kauffman, 1991).

Despite the progress and accomplishments related to implementation of the Individuals with Disabilities Education Act (IDEA) over the last few years, much remains to be done to improve the outcomes of youth with disabilities (Hasazi & Clark, 1988). Currently, very little transition information exists on the nature and extent of state and local implementation, including policies, procedures, and practices.

Moreover, policy makers, administrators, and educators at the federal, state, and local levels lack information regarding the nature of student participation in transition education programs, and the impact these services have on student outcomes; the extent other agencies are involved in the transition process; and the degree transition services access and use information and services available from a variety of federal programs (Research in Education, 1993).

With the lack of transition information, the researcher conducted an investigation to determine whether school administrators and teachers of students with mild disabilities would be able to respond correctly to special education transition questions. In addition, transition knowledge level related to background variables were examined.

Discussion of Results

Eight research questions were posed and used as a guide for reporting results. The questions addressed (a) the extent to which elementary, middle, and high school teachers of students with mild disabilities were able to respond correctly to multiple-choice questions concerning special education transition, (b) the extent to which elementary, middle, and high school teachers of students with mild disabilities differ in their ability to respond correctly to multiple-choice questions concerning special education transition, (c) the extent to which elementary, middle, and high school administrators were able to respond correctly to multiple-choice questions concerning special education transition, (d) the extent to which elementary, middle, and high school administrators differ in their ability to respond correctly to multiple-choice questions concerning special education transition, (e) the relationship of the level of preparation of elementary, middle, and high school teachers of students with mild disabilities to knowledge of special education transition, (f) the relationship of the level of preparation of elementary, middle, and high school administrators to knowledge of special education transition, (g) the relationship of elementary, middle, and high school teachers of students with mild disabilities experiences and background to knowledge of special education transition, (h) the relationship of elementary, middle, and high school

administrators experiences and background to knowledge of special education transition.

First, teachers' ability to respond to the questionnaire was considered. Item analysis was conducted to determine difficulty level or percent passing for each question. A criterion rate of 60% correct was established for the study. Only three questions were mastered by more than 60% of all respondents. Eleven questions involving all content areas, assessed by the instrument, proved to be difficult for the majority of the teachers of students with mild disabilities. Teachers had the least amount of knowledge in the subject area IDEA and court decisions (42%), followed by transition models (43%), and transition components (55%). Other observations indicated that only 11% of teachers had knowledge of life-skills curriculum, and 23% of teachers had knowledge of the responsibilities schools have in implementing the transition requirements of IDEA. Overall, the mean response of teachers sampled was slightly below 7 out of 14 questions or 45% correct. A lack of mastery of the subject content was indicated.

The next question addressed possible differences in knowledge between elementary, middle, and high school teachers. Middle school teachers were removed from the current study due to a small sample size ($n = 3$). The independent variable position did not reach significance at the .05 level established for the investigation. Descriptive statistics provided information indicating that high school

teachers had a mean transition score of (7.027), and elementary school teachers had a mean transition score of (6.35). High school teachers exhibited the least amount of transition knowledge in the subject area IDEA and court decisions (42%) followed by transition components (43%), and transition models (55%). Also, elementary school teachers had the least amount of transition knowledge in the subject area IDEA and court decisions (44%), followed by transition components (47%), and transition models (53%).

The third question addressed administrators' ability to respond to the questionnaire. Item analyses was conducted to determine difficulty level or percent passing for each question. Only two questions were mastered by more than 60% of all respondents. Twelve questions involving all content area, assessed by the instrument, proved to be too difficult for the majority of the school administrators.

Administrators had the least amount of knowledge in the subject area IDEA and court decisions (23%), followed by transition models (48%), and transition components (55%). Other observations indicated that administrators had very limited knowledge in the role of special education (3% correct), interagency linkages, (12% correct) and the schools responsibility in implementing the transition requirements of IDEA (3% correct). Overall, the mean response of the administrators sampled was slightly higher than 5 out of 14 questions or 33 correct. A lack of mastery of subject content was indicated.

The next question addressed possible differences in transition knowledge between elementary, middle, and high school administrators. An analysis of variance indicated that the independent variable position did not reach significance at the .05 level established for the investigation. Descriptive statistics provided information indicating that high school administrators had a mean transition score of (4.55), and middle and elementary school administrators had a mean transition score of (5.46). When studying specific transition subject areas, high school administrations had the least amount of knowledge in IDEA and court decisions (20%) followed by transition models (35%), and transition components (46%). Middle school administrators had the least amount of knowledge in IDEA and court decisions (35%) followed by transition models (43%), and transition components (46%). Elementary school administrators had the least amount of knowledge in IDEA and court decisions (22%) followed by transition models (49%), and transition components (50%).

Toffler (1990) and Sergiovanni (1990) indicated that information is needed to promote change. Information helps to develop innovative ideas to change organizations (Bennis & Nanus; Deal & Peterson, 1990; Eiseman, Fleming, & Roody, 1990). Researchers who have studied education change indicate the importance of strong leadership and a systematic process to facilitate the implementation of innovative ideas

(Schlechty, 1990; Sheive & Schoenhelt, 1987; Villa, Thousand, Stainback, & Stainback, 1992). For example, Kimbrough and Burkett (1990) indicated ways to use information to implement innovative ideas. Information can be used to (a) determine if there is a need for change, (b) promote the idea, (c) decide to change, and (d) give credit to those who change. As neither teachers or school administrators appear to be cognizant of basic tenets of special education transition, how can education changes occur? A lack of transition information may cause teachers and administrators to have difficulties developing successful transition models for students with mild disabilities. For example, school professionals may not include a life-skills curriculum, high school work experience, individual transition plan, community agency planning, and parental participation as major components of their local school district transition model.

Questions five through eight led to the study's most significant findings. The independent variables education level and years of experience did not reach significance at the .05 level established for the investigation. These results indicate a transition void in local education agency inservice training, and teacher and administrators preparation programs. A lack of transition knowledge raises many questions for students with mild disabilities. Does the lack of transition knowledge impede the development of vocational opportunities for students with mild disabilities? Does the lack of transition knowledge impede the development

of community work study programs? Does the lack of transition knowledge impede the development of community living opportunities for students with mild disabilities? Does the lack of transition knowledge impede the development of curriculum for students with mild disabilities. Are inappropriate education curriculums causing students with mild disabilities to drop out of school? Are inappropriate education curriculums facilitating a delinquent lifestyle?

Results of this study indicated that teachers and administrators lack the transition knowledge needed to develop education programs that benefit students with mild disabilities. This lack of transition knowledge provides a rationale why individuals with mild disabilities have low employment rates, live with their parents, and participate in few leisure activities (Haring, Lovett, & Smith, 1990; Neubert, Tilson, & Ianacone, 1989; Richardson, Koller, & Katz, 1988; Sitlington, Frank, & Carson, 1992). Information is needed for education change (Schlechty, 1990; Thousand, Villa, Stainback, & Stainback, 1992; Toffler, 1990). How can educators develop or change existing transition education programs if they do not have knowledge of the transition requirements of the Individuals with Disabilities Education Act, transition models, and components of effective transition education programs?

Limitations of the Study

Four limitations exist in the current study. First, the transition requirements of IDEA are new. Since it has been only 3 years since transition requirements have been in effect, teachers and administrators may have not had the time to learn about transition. Second, the study was conducted in only one state, regional differences in transition knowledge may exist due to several factors such as, population growth, heterogeneity or homogeneity of the population, and regional economic differences. Third, a 52% response rate may limit the generality of study findings. Also, a small sample size limits the generality of study findings.

Implications

Overall, teachers and administrators indicated a lack of special education transition knowledge. This lack was similar for administrators and teachers of students with mild disabilities. The information generated from this study is not positive for special education programs. Federal government policy-makers need to financially support the development of research institutes studying transition education. Research institutes are needed to determine the adult adjustment of persons with disabilities and the variables that impact post-school success. For example, research institutes need to conduct studies to answer questions such as: What impact does societal attitudes have on employment opportunities? Are members of society

discriminating against persons with disabilities? What impact does the media have on shaping the perceptions of societal members towards persons with mild disabilities.

Also, research institutes need to act as a clearinghouse for school districts throughout the United states. Ideally, local education agencies (LEAs) could telephone research institutes to obtain written and videotaped information on exemplary transition practices and progress.

State Board of Education policy-makers need to reconsider current requirements for certification. A requirement for special education transition training for administrators and teachers is needed. State Board of Education policy-makers are encouraged to develop state-wide communities consisting of parents, school, administrators, and teachers, to study certification requirements. Ideally, committees would convene on an annual basis to discuss current certification requirements.

University preparation programs must reconsider their program requirements. University policy-makers are encouraged to look beyond minimum state certification requirements when developing course sequences for their students. Departments of Special Education, Educational Leadership, and Curriculum and Instruction are appropriate locations for school professionals to learn about public school transition. These departments must collaborate to ensure that all students have received at least a basic foundation in this area.

Finally, school districts are encouraged to continue their efforts to provide quality professional development activities regarding school transition for their faculties and staffs. School policies must be updated to ensure that school professionals are required to maintain current knowledge of school transition. The data presented in this study support the conclusion that a need for county inservice programs, to transition issues, exists. This overwhelming need must become a priority to ensure the successful transition of school-age students with disabilities into adult vocational, leisure, and community living opportunities.

Also school districts are encouraged to allocate resources to employ transition specialists. Transition specialists would act as a liaison between public school education programs and community employers and service agencies. For instance, transition specialists would collaborate with local community business leaders to develop community based training sites at restaurants, convenience stores, and hospitals.

Recommendations for Further Research

This study points the way for further transition studies. As this investigation was based upon a state sample only, further studies are warranted to determine whether this is a national issue. Specific populations of educators should be considered for adequate representation to determine if professionals have knowledge of transition, and if given

groups of education professionals have statistically significant differences in their transition knowledge. Indepth qualitative analysis with groups of education professionals could be conducted to determine the degree with which individuals have knowledge of transition beyond those identified by items correct on a survey instrument.

Deliberate emphasis should be given to areas beyond special education to determine whether educators are more familiar with general outcomes of public school education programs. Investigations of State Department of Education transition requirements and university training programs must be conducted to determine if emphasis is placed on transition. Are teachers required for certification to have a transition course? What are the components of university transition courses? Are specific transition practices and programs related to higher employment, community living and leisure participation rates for persons with disabilities?

Recommendations also exist for individual school districts. School district program evaluations and their dissemination provide a link between practice and preparation. Strong communication between school district personnel, community service providers, and university faculty will allow for early identification of transition training deficits. Ongoing communication and professional collaboration will result in the development of successful transition programs for persons with disabilities.

APPENDIX A
SCHOOL ADMINISTRATOR QUESTIONNAIRE

SPECIAL EDUCATION TRANSITION

Instructions

The questionnaire is divided into 3 sections: a 5-item background information section, a 14-item thought and idea section, and a section where you can share any information you wish on special education transition. For your convenience, a glossary of terms is provided. It should take you approximately 10 to 15 minutes to complete the entire questionnaire.

Special Instructions for Responding to the Questionnaire

- (1) If an item does not seem applicable to you, please do not skip it. Instead, select the choice that best fits your situation.
- (2) If you are working in more than one school, allow your answers to reflect an "average" of your experiences across the different schools in which you work.
- (3) Please mail the questionnaire in the enclosed envelope by May 5, 1994.

Glossary of Terms

1983 Amendments to the Education of the Handicapped Act - A legislative document that changed P.L. 94-142: The Education for All Handicapped Children Act which is now P.L. 101-476: The Individuals with Disabilities Education Act.

Carl Perkins Vocational Education Act of 1984 - A public law that focused on the development of vocational opportunities for students.

Career Education - A type of education curriculum or program.

Clark and Kolstoe - Education researchers.

Division on Career Development of the Council for Exceptional Children - A professional organization that publishes a scholarly journal.

Individualized Education Program (IEP) - A written document used to guide the education of students with disabilities.

P.L. 101-476: The Individuals with Disabilities Education Act (IDEA) - A public law addressing the education of students with disabilities.

Background Information

Directions: Please take a few minutes to respond to the following statements.

1. Please write on the line provided your total years of experience as a public school administrator. _____
2. Please place a check next to the statement(s) that indicate your special education experience (check all that apply).

- ☐ No Formal Preparation
- ☐ major in special education
- ☐ minor in special education
- ☐ state certification in special education
- ☐ two or more university courses
- ☐ one university course
- ☐ district inservice
- ☐ attendance at special education conferences or seminar

3. Please place a check next to the statement that indicates the highest degree you have earned and your major.

Degree

- ☐ Bachelor's
- ☐ Master's
- ☐ Doctorate

Major

- ☐ Regular Education
- ☐ Special Education
- ☐ School Administration
- ☐ Psychology
- ☐ Social Work
- ☐ Other

4. Please place a check next to the statement(s) that indicate your special education transition training (check all that apply).

☐ No Formal Preparation

General Background

- ☐ special education transition course
☐ district inservice
☐ exceptional student education class with special education transition component
☐ attendance at special education transition conferences, seminars, or workshops

5. Does your school district have a district-wide transition plan?

- ☐ yes
☐ no
☐ don't know

Ideas and Thoughts

Directions: Please respond to the 14-items in this section by circling the letter next to the response that you think is the most appropriate.

1. In your opinion, transition services should be based upon . . .
 - (a) currently available programs and services.
 - (b) individual student preferences and interests.
 - (c) local community vocational and community living opportunities.
 - (d) currently available fiscal resources.
2. In your opinion, the Individuals with Disabilities Education Act (IDEA) states that transition services should begin no later . . .
 - (a) than 12 years of age (and when determined appropriate at age 10 or younger).
 - (b) than the implementation date of September 1, 1995.
 - (c) than 16 years of age (and when determined appropriate at age 14 or younger).
 - (d) than the implementation data of September 1, 1994.

3. In your opinion, career education refers to . . .
 - (a) the totality of all experiences through which students learn about and prepare to work as a part of their way of living.
 - (b) exploring local communities to identify and develop new vocational opportunities for persons with disabilities.
 - (c) a multi-year education program that trains individuals with disabilities for a specific job such as an auto mechanic or store cashier.
 - (d) an education program that focuses on teaching general work behaviors to individuals with disabilities.
4. Based on your experiences, exemplary transition models . . .
 - (a) involve students and their parents or lawful custodians in all aspects of transition planning.
 - (b) have a structured high school education curriculum that focuses on training persons with disabilities for specific occupations.
 - (c) discourage the movement of students from one transition program to another in order to avoid disjointed educational programming.
 - (d) have transition specialists that monitor local, state, and national transition programs.
5. In your opinion, to implement the IDEA transition requirements . . .
 - (a) schools are required to have a transition specialist.
 - (b) schools are responsible for providing a life-skills curriculum and community work experiences.
 - (c) schools have no authority to compel non-school agencies to participate in the IEP/transition planning process.
 - (d) school districts need increased federal funding and professional training.
6. In your opinion, to comply with the transition requirements of IDEA, the general role of special education is to . . .
 - (a) survey community vocational opportunities in order to design transition education programs for students with disabilities.
 - (b) develop community and professional awareness of and support for transition programs and services.
 - (c) conduct transition research to design and implement exemplary transition programs.
 - (d) design education curriculum that facilitates the movement of students with disabilities from school to the world of work.

7. In your opinion, the Carl Perkins Vocational Education Act of 1984, requires that . . .
 - (a) starting in grade five, individual transition plans are to be developed for public school students.
 - (b) to obtain federal financial support, local school districts are to develop model transition programs for students with disabilities.
 - (c) all students with disabilities and their parents be informed of vocational programs and the accompanying entry requirements prior to ninth grade.
 - (d) starting in ninth grade, individual transition plans are to be developed for public school students with disabilities.
8. Many school districts have developed transition models. Based on your experiences in exemplary transition models, the role of the special education administrator is to . . .
 - (a) facilitate local or regional interagency agreements with adult service agencies.
 - (b) elicit information from families about their future goals for their children with disabilities.
 - (c) provide a supportive atmosphere for the student and family at all stages of transition planning.
 - (d) provide a forum for regional and state agencies to discuss interagency goals and objectives.
9. In your opinion, the Individuals With Disabilities Education Act (IDEA) refers to transition as . . .
 - (a) a coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities.
 - (b) a public or private school educational program that facilitates the acquisition of skills needed to gain meaningful employment, and community living opportunities.
 - (c) the movement of individuals from one private or public school setting to another. For example, moving from middle school vocational programs to high school vocational programs.
 - (d) a coordinated set of activities for service agencies to design education programs that facilitate the movement of students with disabilities from school to competitive employment.

10. IDEA establishes the expectation that the delivery of transition services is not solely a school responsibility. However, based on your experiences, the school is responsible for ensuring that the IEP includes . . .
 - (a) when appropriate, a statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting.
 - (b) specific names of public school personnel or agency representatives (or both) who are responsible for providing transition services.
 - (c) a state and federal funding formula for financially supporting transition services. Also, cost estimates for each transition service is indicated on the individual education program.
 - (d) a sequential list of education goals and objectives that ultimately lead to the successful employment of a student with disabilities.

11. In your opinion, in order to satisfactorily comply with the transition requirements outlined in Section 1401 of IDEA, the individual education program (IEP) team must . . .
 - (a) show evidence that each individual's transition service needs are being met, even when non-school agencies fail to follow through on service commitments.
 - (b) show evidence that individuals and agencies who participate in the IEP process are financially responsible for transition programming.
 - (c) show evidence that local transition councils are available to advise and provide transition services. Members of the transition council shall include, parents and representatives from education and community agencies.
 - (d) show evidence that a documentation system exists to indicate a school districts efforts to provide transition services for students with disabilities.

12. The IDEA regulations require the participation of two types of representatives (beyond the listing of required participants in P.L. 94-142) for developing the transition goals of the IEP. Based on your experiences, they include:
 - (a) a school counselor and a local community vocational rehabilitation representative responsible for providing employment and independent living services to adults with disabilities.
 - (b) a vocational instructor, and a representative of a local business that has part-time or full-time employees who are disabled.

- (c) a representative of the school responsible for providing or supervising transition services, and a representative of the participating agency responsible for providing or paying for transition services.
 - (d) a representative of the local advocacy agency for individuals with disabilities and a representative from community agencies providing transition services.
13. Based on your experiences, the 1983 Amendments to the Education of the Handicapped Act authorized . . .
- (a) teacher training institutions to conduct single-subject research to determine the variables that impact the transition from school to adult life. To receive financial support researchers must disseminate findings to state departments of education and local education agencies.
 - (b) funding for the support of model demonstration programs to strengthen and coordinate education, training, and related services to assist youth with disabilities in the transition from school to adult life.
 - (c) education agencies to hire professional transition specialists to survey the employment needs of local communities. Transition specialists are to have a degree in education, psychology, or other related discipline.
 - (d) funding for the development of community vocational sites for students with disabilities. Also, resources are allocated to agencies who provided vocational training.
14. The IDEA formalized the concept of interagency and community linkages by making it part of the individual education plan process. From your understanding the IDEA also states . . .
- (a) that the agency rendering services is responsible for developing an implementation plan to document if transition goals and objectives are met.
 - (b) that public school staff are responsible for locating members of the local community who can financially support transition programs.
 - (c) in the case where a participating agency, other than the educational agency, fails to provide agreed upon services, the educational agency shall reconvene the IEP team.
 - (d) in the case of new federal funding formulas, vocational and educational agencies shall reconvene to determine the allocation of resources. If monetary resources impact transition services, the educational agency shall reconvene the IEP team.

Thank you for your important contribution to my research!! Please use this space for any further thoughts you would like to share about special education transition.

Optional: If you feel comfortable, would you list a permanent phone number at which you can be reached.

Address:

Phone Number:

This information will be kept entirely confidential.

For more information about the survey or results, please contact:

Greg Ruediger
Special Services and Administrative Studies
Pittsburg State University
Pittsburg, KS 66762

APPENDIX B
TEACHER QUESTIONNAIRE

SPECIAL EDUCATION TRANSITION

Instructions

The questionnaire is divided into 3 sections: a 5-item background information section, a 14-item thought and idea section, and a section where you can share any information you wish on special education transition. For your convenience, a glossary of terms is provided. It should take you approximately 10 to 15 minutes to complete the entire questionnaire.

Special Instructions for Responding to the Questionnaire

- (1) If an item does not seem applicable to you, please do not skip it. Instead, select the choice that best fits your situation.
- (2) If you are working in more than one school, allow your answers to reflect an "average" of your experiences across the different schools in which you work.
- (3) Please mail the questionnaire in the enclosed envelope by May 5, 1994.

Glossary of Terms

1983 Amendments to the Education of the Handicapped Act - A legislative document that changed P.L. 94-142: The Education for All Handicapped Children Act which is now P.L. 101-476: The Individuals with Disabilities Education Act.

Carl Perkins Vocational Education Act of 1984 - A public law that focused on the development of vocational opportunities for students.

Career Education - A type of education curriculum or program.

Clark and Kolstoe - Education researchers.

Division on Career Development of the Council for Exceptional Children - A professional organization that publishes a scholarly journal.

Individualized Education Program (IEP) - A written document used to guide the education of students with disabilities.

P.L. 101-476: The Individuals with Disabilities Education Act (IDEA) - A public law addressing the education of students with disabilities.

Background Information

Directions: Please take a few minutes to respond to the following statements.

1. Please write on the line provided your total years of experience as a public school teacher. _____
2. Please place a check next to the statement(s) that indicate your special education experience (check all that apply).

General Background

- ☐ major in special education
- ☐ minor in special education
- ☐ state certification in special education
- ☐ two or more university courses
- ☐ one university course
- ☐ district inservice
- ☐ attendance at special education conferences or seminars
- ☐ No Formal Preparation

3. Please place a check next to the statement that indicates the highest degree you have earned and your major.

Degree

- ☐ Bachelor's
- ☐ Master's
- ☐ Doctorate

Major

- ☐ Regular Education
- ☐ Special Education
- ☐ School Administration
- ☐ Psychology
- ☐ Social Work
- ☐ Other

4. Please place a check next to the statement(s) that indicates your special education transition training (check all that apply).

General Training

- ☐ special education transition course
- ☐ district service
- ☐ exceptional student education class with special education transition component
- ☐ attendance at special education transition conferences, seminars, or workshops
- ☐ No Formal Preparation

5. Does your school district have a district-wide transition plan?

- ☐ yes
- ☐ no
- ☐ don't know

Ideas and Thoughts

Directions: Please respond to the 14-items in this section by circling the letter next to the response that you think is the most appropriate.

1. In your opinion, transition services should be based upon . . .
 - (a) currently available programs and services.
 - (b) individual student preferences and interests.
 - (c) local community vocational and community living opportunities.
 - (d) currently available fiscal resources.
2. Based on your experiences, transition objectives commonly focus on . . .
 - (a) independent living, employment, and leisure activities.
 - (b) parent counseling and training, physical therapy, and mobility.
 - (c) functional academics, independent living, and mobility.
 - (d) life skills, independent transportation, and use of community service agencies.

3. Based on your experiences, career education includes instruction in the phases of . . .
 - (a) career awareness, career exploration, and career preparation.
 - (b) career vocational assessment, career choice, and vocational training.
 - (c) career identification, vocational assessment, and job training.
 - (d) career awareness, career choice, and career training.
4. In your opinion, the Individuals with Disabilities Education Act (IDEA) states that transition services should begin no later . . .
 - (a) than 12 years of age (and when determined appropriate at age 10 or younger).
 - (b) than the implementation date of September 1, 1995.
 - (c) than 16 years of age (an when determine appropriate at age 14 or younger).
 - (d) than the implementation date of September 1, 1994.
5. In your opinion, an individual transition plan is . . .
 - (a) one of the many transition requirements of the Individuals with Disabilities Education Act.
 - (b) a document used to coordinate transition services for individuals with disabilities.
 - (c) a document to indicate the fiscal resources used to provide transition services..
 - (d) a document used over a 3-year period to coordinate education programs for individuals with disabilities.
6. Clark and Kolstoe (1992) discussed life-skill curriculum. In your opinion, they stated that life-skill curriculums should be . . .
 - (a) started in high school as a separate class, and taught by regular education.
 - (b) adult-referenced, empirically and socially valid, and community-based.
 - (c) based on the current and future environments of persons with disabilities.
 - (d) ongoing throughout formal education, and taught by a multi-disciplinary education team.

7. In your opinion, career education refers to . . .
 - (a) the totality of all experiences through which students learn about and prepare to work as part of their way of living.
 - (b) exploring local communities to identify and develop new vocational opportunities for persons with disabilities.
 - (c) a multi-year education program that trains individuals with disabilities for a specific job such as an auto mechanic or store cashier.
 - (d) an education program that focuses on teaching general work behaviors to individuals with disabilities.
8. Based on your experiences, exemplary transition models . . .
 - (a) involve students and their parents or lawful custodians in all aspects of transition planning.
 - (b) have a structured high school education curriculum that focuses on training persons with disabilities for specific occupations.
 - (c) discourage the movement of students from one transition program to another in order to avoid disjointed educational programming.
 - (d) have transition specialists that monitor local, state, and national transition programs.
9. In your opinion, to implement the IDEA transition requirements . . .
 - (a) schools are required to have a transition specialist.
 - (b) schools are responsible for providing a life-skills curriculum and community work experiences.
 - (c) schools have no authority to compel non-school agencies to participate in the IEP/transition planning process.
 - (d) school districts need increased federal funding and professional training.
10. Based on your experiences, individual transition plans commonly include . . .
 - (a) a comments column that can be used in a number of ways, such as indicating the status of a particular goal.
 - (b) written documentation indicating when the activities associated with a particular goal will be initiated and the duration which the service will be rendered.
 - (c) written documentation indicating the local education agencies goal for transition education.
 - (d) written documentation indicating who will provide transition services for students with disabilities.

11. In your opinion, the Individuals with Disabilities Education Act (IDEA) refers to transition as . . .
 - (a) a coordinated set of activities for a student, designed, within an outcome-oriented process, which promotes movement from school to post-school activities.
 - (b) a public or private school educational program that facilitates the acquisition of skills needed to gain meaningful employment, and community living opportunities.
 - (c) the movement of individuals from one private to public school setting to another. For example, moving from middle school vocational programs to high school vocational programs.
 - (d) a coordinated set of activities for service agencies to design education programs that facilitate the movement of students with disabilities from school to competitive employment.
12. Based on your professional readings, The Division on Career Development (DCD) of the Council for Exceptional Children advocated all of the following principles for providing career development and transition education except . . .
 - (a) career development is a process begun at birth and continues throughout life.
 - (b) career development is responsive to intervention and programming, when the programming involves direct instruction for individual needs.
 - (c) career development and transition education is the responsibility of public schools and vocational rehabilitation.
 - (d) career development and transition education is a complex multi-faceted process that takes into account societal changes.
13. IDEA establishes the expectation that the delivery of transition services is not solely a school responsibility. However, based on your experiences, the school is responsible for ensuring that the IEP includes . . .
 - (a) when appropriate, a statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting.
 - (b) specific names of public school personnel or agency representatives (or both) who are responsible for providing transition services.
 - (c) a state and federal funding formula for financially supporting transition services. Also, cost estimates for each transition service is indicated on the individual education program.

- (d) a sequential list of education goals and objectives that ultimately lead to the successful employment of a student with disabilities.
14. In your opinion, in order to satisfactorily comply with the transition requirements outlined in Section 1401 of IDEA, the individual education program (IEP) team must . . .
- (a) show evidence that each individual's transition service needs are being met, even when non-school agencies fail to follow through on service commitments.
 - (b) show evidence that individuals and agencies who participate in the IEP process are financially responsible for transition programming.
 - (c) show evidence that local transition councils are available to advise and provide transition services. Members of the transition council shall include, parents and transition services. Members of the transition council shall include parents and representatives from education and community agencies.
 - (d) show evidence that a documentation system exists to indicate a school district's efforts to provide transition services for students with disabilities.

Thank you for your important contribution to my research!! Please use this space for any further thoughts you would like to share about special education transition.

Optional: If you feel comfortable, would you list a permanent phone number at which you can be reached.

Address:

Phone Number:

This information will be kept entirely confidential.

For more information about the survey or results, please contact:

Greg Ruediger
Special Services and Administrative Studies
Pittsburg State University
Pittsburg, KS 66762

APPENDIX C
CORRESPONDENCE TO SCHOOL PROFESSIONALS

April 7, 1994

Dear School Administrator:

You have been selected to volunteer as a participant in my dissertation study about special education transition. The United States Department of Education (DOE) has indicated that the successful transition of students with disabilities into local communities is a national priority. As a school administrator, your input is critical. The more administrators who provide information the more accurate and representative my results will be. To gather this information, I am requesting that you complete the enclosed questionnaire and return it by April 21 in the stamped envelope provided.

Results from this questionnaire will be shared with district administrators and Kansas teacher training institutions for the purpose of providing professional transition training opportunities. In addition, information gathered from this study will be disseminated through presentations at state and national education conferences.

Your participation is completely voluntary. If you participate, you do not have to answer any questions that you do not wish to answer and you are free to withdraw your response to the questionnaire at any time. You will not be compensated for participation in the study. I have numbered each individual questionnaire for the mailing of post card reminders/requests only. These code numbers will be removed upon receipt. Thus, your name will not be associated with the data.

Thank you for responding within a short time period. I greatly appreciate your much needed assistance in this important study. If you have any questions, please call me at (316) 231-8464.

Sincerely,

Gregory J. Ruediger
Doctoral Candidate

Dear Special Education Teacher:

You have been selected to volunteer as a participant in my dissertation study about special education transition. The United States Department of Education (DOE) has indicated that the successful transition of students with disabilities into local communities is a national priority.

As a special education teacher, your input is critical. The more teachers who provide information the more accurate and representative my results will be. To gather this information, I am requesting that you complete the enclosed questionnaire and return it by April 21 in the stamped envelope provided.

Results from this questionnaire will be shared with district administrators and Kansas teacher training institutions for the purpose of providing professional transition training opportunities. In addition, information gathered from this study will be disseminated through presentations at state and national education conferences.

Your participation is completely voluntary. If you participate, you do not have to answer any questions that you do not wish to answer and you are free to withdraw your response to the questionnaire at any time. You will not be compensated for participation in the study. I have numbered each individual questionnaire for the mailing of post card reminders/requests only. These code numbers will be removed upon receipt. Thus, your name will not be associated with the data.

Thank you for responding within a short time period. I greatly appreciate your much needed assistance in this important study. If you have any questions, please call me at (316) 231-8464.

Sincerely,

Gregory J. Ruediger
Doctoral Candidate

Postcard Reminder

April 17, 1994

Please return the Special Education Transition Questionnaire. If you have any questions or would like a new copy of the questionnaire please contact Greg Ruediger at Pittsburg State University (316) 231-8464.

Thank you.

April 28, 1994

Dear Special Education Teacher:

Though I realize you are an extremely busy individual, I am writing again to encourage your participation in my dissertation study. As a teacher, your input is critical. Due to the nature of the study's design, it is extremely important for me to obtain a high rate of return to insure the reliability of the findings. Following the first mailing and reminder postcards, I was able to obtain a 40% response rate. In order for my research study to be successful I need your help in increasing my response rate.

The questionnaire I have developed for my study involves questions regarding professional background and special education transition issues. Information collected will be kept strictly confidential with group responses only reported. Your input is of great value not only to my study but to the field of special education.

To participate in my research study please complete the items on the enclosed questionnaire and return it to me in the stamped envelope provided by May 5. I greatly appreciate your much needed assistance in this important study. If you have any questions, please call me at (316) 231-8464.

Sincerely,

Gregory J. Ruediger
Doctoral Candidate

April 28, 1994 .

Dear School Administrator:

Though I realize you are an extremely busy individual, I am writing again to encourage your participation in my dissertation study. As a school administrator, your input is critical. Due to the nature of the study's design, it is extremely important for me to obtain a high rate of return to insure the reliability of the findings. Following the first mailing and reminder postcards, I was able to obtain a 40% response rate. In order for my research study to be successful, I need your help in increasing my response rate. The questionnaire I have developed for my study involves questions regarding professional background and special education transition issues. Information collected will be kept strictly confidential with group responses only reported.

Your input is of great value not only to my study but to the field of special education. To participate in my research study please complete the items on the enclosed questionnaire and return it to me in the stamped envelope provided by May 5. I greatly appreciate your much needed assistance in this important study. If you have any questions, please call me at (316) 231-8464.

Sincerely,

Gregory J. Ruediger
Doctoral Candidate

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BIOGRAPHICAL SKETCH

I was the second of four children born to Donald and Lois Ruediger. Throughout the formative years I grew up in a rural community in Minnesota. I was graduated from Breckenridge High School (Minnesota), in 1982 and attended Moorhead State University in Moorhead, Minnesota, where I majored in special education.

In 1986, I began my public school teaching career teaching students with severe emotional disturbances and later students with mental retardation in the Palm Beach County, Florida, school district. During this time I completed a master's degree from Nova University, Ft. Lauderdale, Florida.

In 1989, I left Palm Beach County to develop a traveling school for a large entertainment corporation. I acted as school administrator and elementary teacher. The private school traveled along the eastern coast of the United States. After a year traveling, I resigned from the entertainment corporation to attend the doctoral program in special education administration at the University of Florida. With the completion of course work, an internship in Santa Rosa County and this dissertation, I will have completed my program.

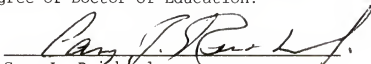
Currently, I am an assistant professor in the Department of Special Services and Administrative Studies at Pittsburg State University, Pittsburg, Kansas. I am responsible for training future teachers to educate students with disabilities. Some of my other professional interests include delinquency prevention, school administration, professional collaboration, transition, and least restrictive environment.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.



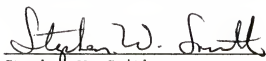
Cecil D. Mercer, Chair
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.



Cary L. Reichard
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.



Stephen W. Smith
Assistant Professor of Special
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.



Phillip A. Clark
Professor of Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.



Bert Swanson
Professor of Political Science

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Education.

August 1994


Dean, College of Education

Dean, Graduate School